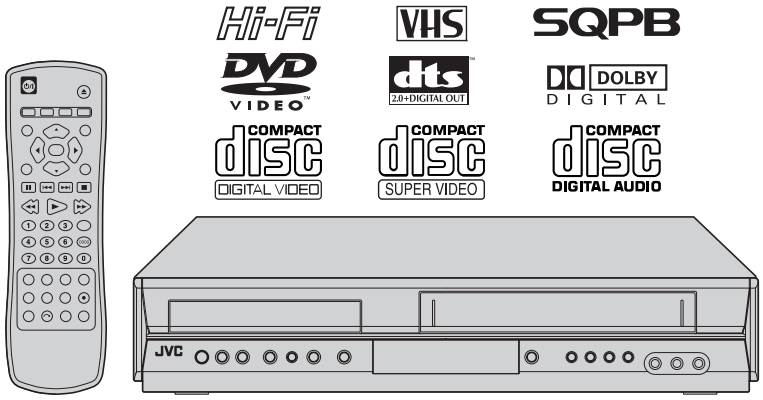
JVC

SERVICE MANUAL

DVD PLAYER & VIDEO CASSETTE RECORDER

HR-XVC16BUS,HR-XVC16BUC, HR-XVC17SUS,HR-XVC17SUC

Area Suffix	
US	U.S.A.
UC	Canada



HR-XVC16BUS,HR-XVC16BUC,HR-XVC17SUS,HR-XVC17SUC [D6PV11]

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SPECIFICATION

HR-XVC16BUS,HR-XVC16BUC,HR-XVC17SUS,HR-XVC17SUC	
General	
Power requirements	120 V, 60 Hz
Power consumption	16 W (POWER ON) 0.8 W (STANDBY mode)
Dimensions (approx.)	16.9" X 3.1" X 10.4" (430 X 78.5 X 265 mm) (w x h x d)
Weight (approx.)	9.24 lbs (4.2 kg)
Operating temperature	5°C to 40°C (41°F to 104°F)
Operating humidity	5 % to 90 %
Signal system	NTSC
Inputs	
ANTENNA IN	75 ohms (VHF/UHF/CATV)
VHS VIDEO IN(LINE1, 2)	1 V (p-p) 75 ohms, sync negative, RCA jack x 2
VHS AUDIO IN(LINE1, 2)	-6.0 dBm more than 47 ohms, RCA jack (L, R) x 2
Outputs	
VIDEO OUT	1 V (p-p) 75 ohms, sync negative
COMPONENT VIDEO OUT	(Y) 1.0 V (p-p), 75 ohms, negative sync, RCA jack x 1
(PROGRESSIVE SCAN)	(Pb)/(Pr) 0.7 V (p-p), 75 ohms, RCA jack x 2
Audio output (digital audio)	0.5 V (p-p), 75 ohms, RCA jack x 1
Audio output (analog audio)	2.0 Vrms (1 KHz, 0 dB), 600 ohms, RCA jack (L, R) x 1
RF OUT	Channel 3 or 4 (Adjustable)
VCR Specifications	
Head system	Four head helical scan azimuth system
Timer	12-hour display type with AM, PM
Tape speed	SP: 33.35 mm/sec, LP: 16.67 mm/sec, SLP: 11.12 mm/sec
Tape width	12.7 mm
Maximum recording time	SP: 2 HOURS (T-120), SLP: 6 HOURS (T-120)/8 HOURS (T-160)
Rewind time	About 3 minutes (T-120)
Channel coverage	VHF: 2-13, UHF: 14-69, CATV: 1-125 (4A, A-W, W+1 - W+84, A-5 - A-1)
Frequency range	20 Hz to 20 kHz
Signal-to-noise ratio	More than 43 dB
Dynamic range	More than 88 dB
Channel separation	More than 60 dB
DVD Specifications	
Laser system	Semiconductor laser, wavelength 650 nm
Frequency response	DVD (PCM 96 kHz): 8 Hz to 44 kHz, DVD (PCM 48 kHz): 8 Hz to 22 kHz CD: 8 Hz to 20 kHz
Signal-to-noise ratio	More than 100 dB (ANALOG OUT jacks only)
Harmonic distortion	Less than 0.008%
Dynamic range	More than 95 dB (DVD/CD)
Accessories	
RF 75-ohm Coaxial Cable x 1, Remote control x 1, Batteries (R03/AAA) x 2	

- Designs and specifications are subject to change without notice.

SECTION 1
PRECAUTION

1.1 SAFTY PRECAUTIONS

Prior to shipment from the factory, JVC products are strictly inspected to conform with the recognized product safety and electrical codes of the countries in which they are to be sold.However,in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

1.1.1 Precautions during Servicing

(1) Locations requiring special caution are denoted by labels and inscriptions on the cabinet, chassis and certain parts of the product.When performing service, be sure to read and comply with these and other cautionary notices appearing in the operation and service manuals.

(2) Parts identified by the ⚠ symbol and shaded ( ) parts are critical for safety.
Replace only with specified part numbers.

NOTE :

Parts in this category also include those specified to comply with X-ray emission standards for products using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.

(3) Fuse replacement caution notice.
Caution for continued protection against fire hazard.
Replace only with same type and rated fuse(s) as specified.

(4) Use specified internal wiring. Note especially:
- Wires covered with PVC tubing
- Double insulated wires
- High voltage leads

(5) Use specified insulating materials for hazardous live parts. Note especially:
- Insulation Tape
- PVC tubing
- Spacers
- Insulation sheets for transistors
- Barrier

(6) When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.) wrap ends of wires securely about the terminals before soldering.

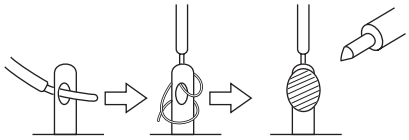


Fig.1-1-1

(7) Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.)

(8) Check that replaced wires do not contact sharp edged or pointed parts.

(9) When a power cord has been replaced, check that 10-15 kg of force in any direction will not loosen it.

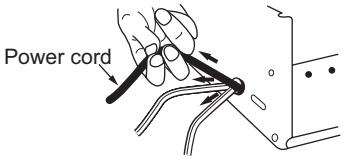


Fig.1-1-2

(10) Also check areas surrounding repaired locations.

(11) Products using cathode ray tubes (CRTs)In regard to such products, the cathode ray tubes themselves, the high voltage circuits, and related circuits are specified for compliance with recognized codes pertaining to X-ray emission. Consequently, when servicing these products, replace the cathode ray tubes and other parts with only the specified parts. Under no circumstances attempt to modify these circuits.Unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

(12) Crimp type wire connectorIn such cases as when replacing the power transformer in sets where the connections between the power cord and power trans former primary lead wires are performed using crimp type connectors, if replacing the connectors is unavoidable, in order to prevent safety hazards, perform carefully and precisely according to the following steps.
- **Connector part number** :E03830-001
- **Required tool** : Connector crimping tool of the proper type which will not damage insulated parts.
- **Replacement procedure**

a) Remove the old connector by cutting the wires at a point close to the connector.Important : Do not reuse a connector (discard it).

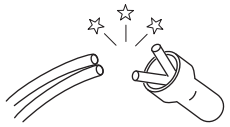


Fig.1-1-3

b) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.

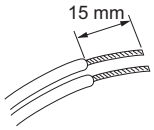


Fig.1-1-4

c) Align the lengths of the wires to be connected. Insert the wires fully into the connector.

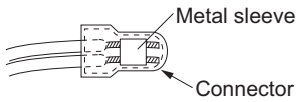


Fig.1-1-5

d) As shown in Fig.1-1-6, use the crimping tool to crimp the metal sleeve at the center position. Be sure to crimp fully to the complete closure of the tool.

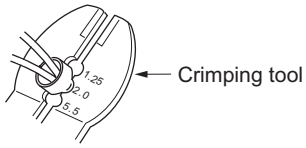


Fig.1-1-6

e) Check the four points noted in Fig.1-1-7.

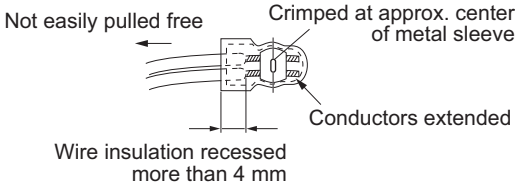

Not easily pulled free
Crimped at approx. center of metal sleeve
Conductors extended
Wire insulation recessed more than 4 mm

Fig.1-1-7

1.1.2 Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions, Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

(1) Insulation resistance test
Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).See table 1 below.

(2) Dielectric strength test
Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See Fig.1-1-11 below.

(3) Clearance distance
When replacing primary circuit components, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metallic parts. See Fig.1-1-11 below.

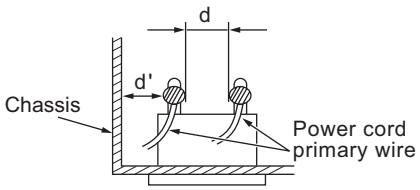


Fig.1-1-8

(4) Leakage current test
Confirm specified or lower leakage current between earth ground/power cord plug prongs and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).
Measuring Method : (Power ON)Insert load Z between earth ground/power cord plug prongs and externally exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See Fig.1-1-9 and following Fig.1-1-12.

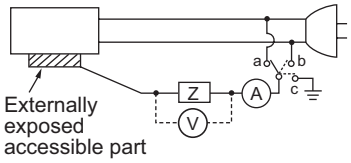
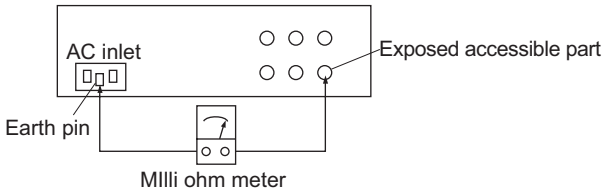


Fig.1-1-9

(5) Grounding (Class 1 model only)
Confirm specified or lower grounding impedance between earth pin in AC inlet and externally exposed accessible parts (Video in, Video out, Audio in, Audio out or Fixing screw etc.).Measuring Method:
Connect milli ohm meter between earth pin in AC inlet and exposed accessible parts. See Fig.1-1-10 and grounding specifications.



Grounding Specifications

Region	Grounding Impedance (Z)
USA & Canada	Z ≦ 0.1 ohm
Europe & Australia	Z ≦ 0.5 ohm

Fig.1-1-10

AC Line Voltage	Region	Insulation Resistance (R)	Dielectric Strength	Clearance Distance (d), (d')
100 V	Japan	R≧ 1 MΩ/500 V DC	AC 1 kV 1 minute	d, d' ≧ 3 mm
100 to 240 V			AC 1.5 kV 1 minute	d, d' ≧ 4 mm
110 to 130 V	USA & Canada	1 MΩ ≦R≦ 12 MΩ/500 V DC	AC 1 kV 1 minute	d, d' ≧ 3.2 mm
110 to 130 V 200 to 240 V	Europe & Australia	R≧ 10 MΩ/500 V DC	AC 3 kV 1 minute (Class Ⅱ) AC 1.5 kV 1 minute (Class Ⅰ)	d ≧ 4 mm d' ≧ 8 mm (Power cord) d' ≧ 6 mm (Primary wire)

Fig.1-1-11

AC Line Voltage	Region	Load Z	Leakage Current (i)	a, b, c
100 V	Japan	1 kΩ	i ≦ 1 mA rms	Exposed accessible parts
110 to 130 V	USA & Canada	0.15 μF, 1.5 kΩ	i ≦ 0.5 mA rms	Exposed accessible parts
110 to 130 V 220 to 240 V	Europe & Australia	2 kΩ	i ≦ 0.7 mA peak i ≦ 2 mA dc	Antenna earth terminals
		50 kΩ	i ≦ 0.7 mA peak i ≦ 2 mA dc	Other terminals

Fig.1-1-12

NOTE :
These tables are unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

1.2 Preventing static electricity

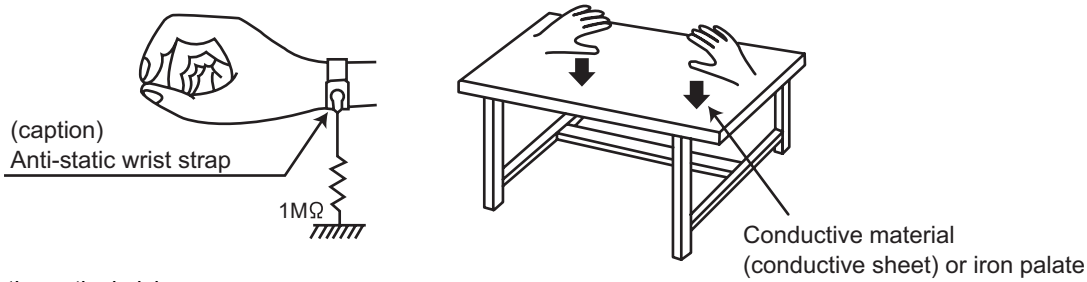
Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

1.2.1 Grounding to prevent damage by static electricity

Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as DVD players.
Be careful to use proper grounding in the area where repairs are being performed.

(1) Ground the workbench
Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

(2) Ground yourself
Use an anti-static wrist strap to release any static electricity built up in your body.

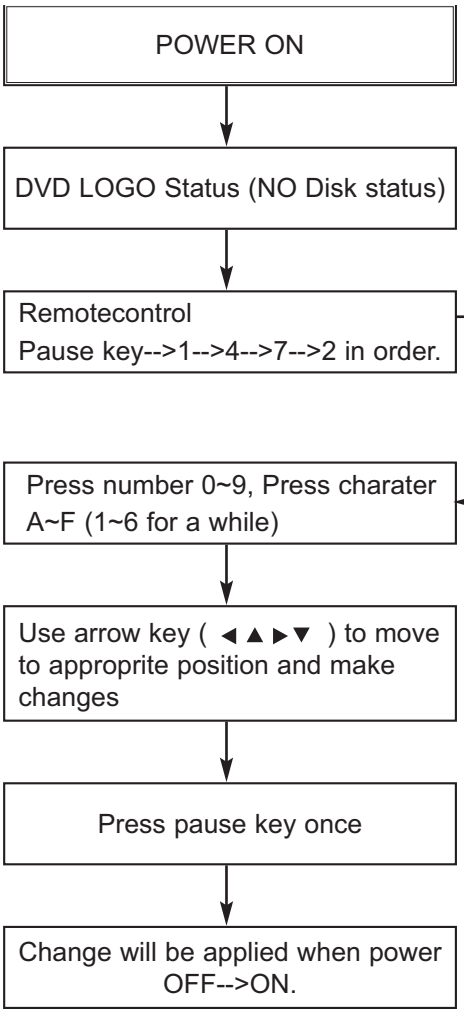


(3) Handling the optical pickup

- In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition.
  (Refer to the text.)
- Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

2.1 SERVICE INFORMATION FOR EEPROM (DVD)


POWER ON
DVD LOGO Status (NO Disk status)
Remotecontrol
Pause key-->1-->4-->7-->2 in order.
Press number 0~9, Press charater A~F (1~6 for a while)
Use arrow key (◄ ▲ ► ▼) to move to approprite position and make changes
Press pause key once
Change will be applied when power OFF-->ON.

DETECT NEW EEPROM
(OPTION EDIT SCREEN)

MODEL NAME	HR-XVC16BUS HEX	HR-XVC17SUS HEX	HR-XVC16BUC HEX	HR-XVC17SUC HEX
OPT 1	55	55	43	43
OPT 2	53	53	41	41
OPT 3	0	0	0	0
OPT 4	3	3	43	43
OPT 5	12	12	12	12
OPT 6	5	5	5	5
OPT 7	34	34	34	34
OPT 8	0	0	0	0
OPT 9	0	0	0	0
OPT A	0	0	0	0
OPT B	C0	C0	C0	C0
OPT C	40	40	40	40
OPT D	28	28	28	28
OPT E	20	20	20	20
OPT F	3	3	3	3
OPT G	3D	3D	3D	3D

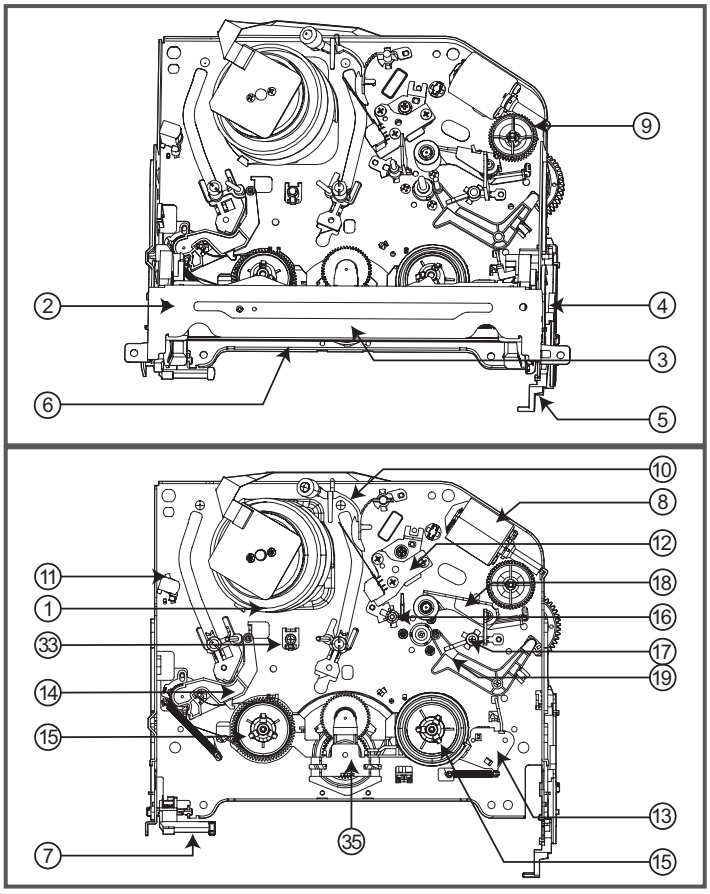
* OPTION

- NTSC model doesn't have VCR option and use DVD option B~F as VCR option. (only DVD exist)
- PAL model has another separate VCR option. (Both VCR and DVD exist)

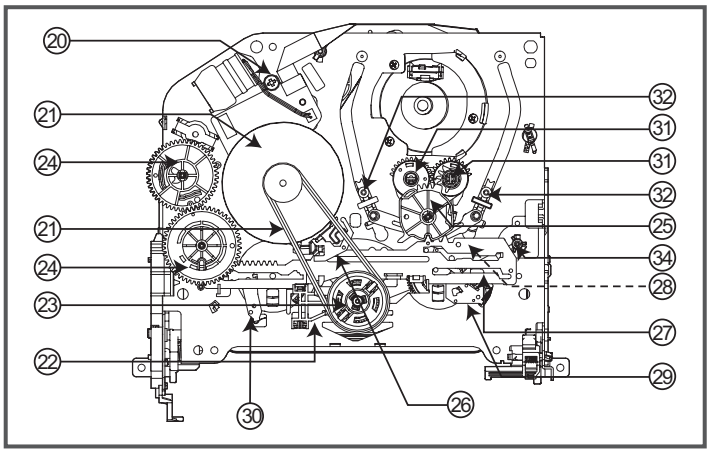
SECTION 3
DISASSEMBLY

3.1 POSITION DRAWING OF DECK MECHANISM PARTS (VCR)

· Top View



· Bottom View



Order Of Dis-assembled / Parts firstly Disassembled		Part	Fixing T ype	Ref. Draw-ings	Posi tion
	1	Drum Assembly	3 screws	A-1	T
	2	Plate Top	2 hooks	A-2	T
2	3	Holder Assembly CST	6 chasses	A-2	T
2,3	4	Gear Assembly Rack F/L	1 hook	A-2	T
2,3,4	5	Opener Door	Chassis Hole	A-2	T
2,3,4,5	6	Arm Assembly F/L	Chassis Hole	A-2	T
	7	Lever Assembly S/W	Chassis Hole, 1 hook	A-2	T
	8	Motor Assembly L/D	1 screw	A-3	T
	9	Gear Wheel	2 hooks	A-3	T
	10	Arm Assembly Cleaner	Chassis Embossing	A-3	T
	11	Head F/E	Chassis Embossing	A-3	T
	12	Base Assembly A/C Head	1 screw	A-3	T
2,3	13	Brake Assembly T	1 hook	A-4	T
2,3	14	Arm Assembly Tension	1 hook	A-4	T
2,3,13,14	15	Reel S / Reel T	Shaft	A-4	T
	16	Base Assembly P4	Chassis Embossing	A-5	T
	17	Opener Lid	Chassis Embossing	A-5	T
17	18	Arm Assembly Pinch	Shaft	A-5	T
17	19	Arm T/up	1 hook	A-5	T
	20	Supporter, capstan	Chassis Hole	A-6	B
17,18	21	Belt Capstan/Motor Capstan	3 screws	A-6	B
	22	Lever F/R	Locking Tab	A-6	B
21, 22	23	Clutch Assembly D37	Washer	A-6	B
	24	Gear Drive/Gear Cam	Washer/Hook	A-7	B
	25	Gear Sector	Hook	A-7	B
21	26	Brake Assembly Capstan	Chassis Hole	A-7	B
21,22,23, 24,2526	27	Plate Slider	Chassis Guide	A-7	B
21,22,23, 24,2526,27	28	Lever Tension	1 Hook	A7	B
21,22,23, 24,2526,27	29	Lever Spring	1 Hook	A-7	B
21,22,23, 24,2526,27	30	Lever Brake	1 Hook	A-7	B
25	31	Gear Assembly P2/ Gear Assembly P3	Bass	A-8	B
2, 3, 14, 25, 31	32	Base Assembly P2 /Base Assembly P3	6 Chasses	A-8	B
25, 31	33	Base Loading	3 Hooks	A-8	B
2,3,14	34	Base Tension	Chassis Embossing	A-9	T
	35	Arm Assembly Idler Jog	Locking Tab	A-9	T

T:Top, B:Bottom

NOTE : Assembly order is a reverse of disassembly order.

(1) For assembly, check the assembly mode is accurate.
(2) Parts firstly disassembled indicate parts firstly disassembled in disassembly of related parts.

3.2 DISASSEMBLY AND ASSEMBLY OF DECK MECHANISM (VCR)

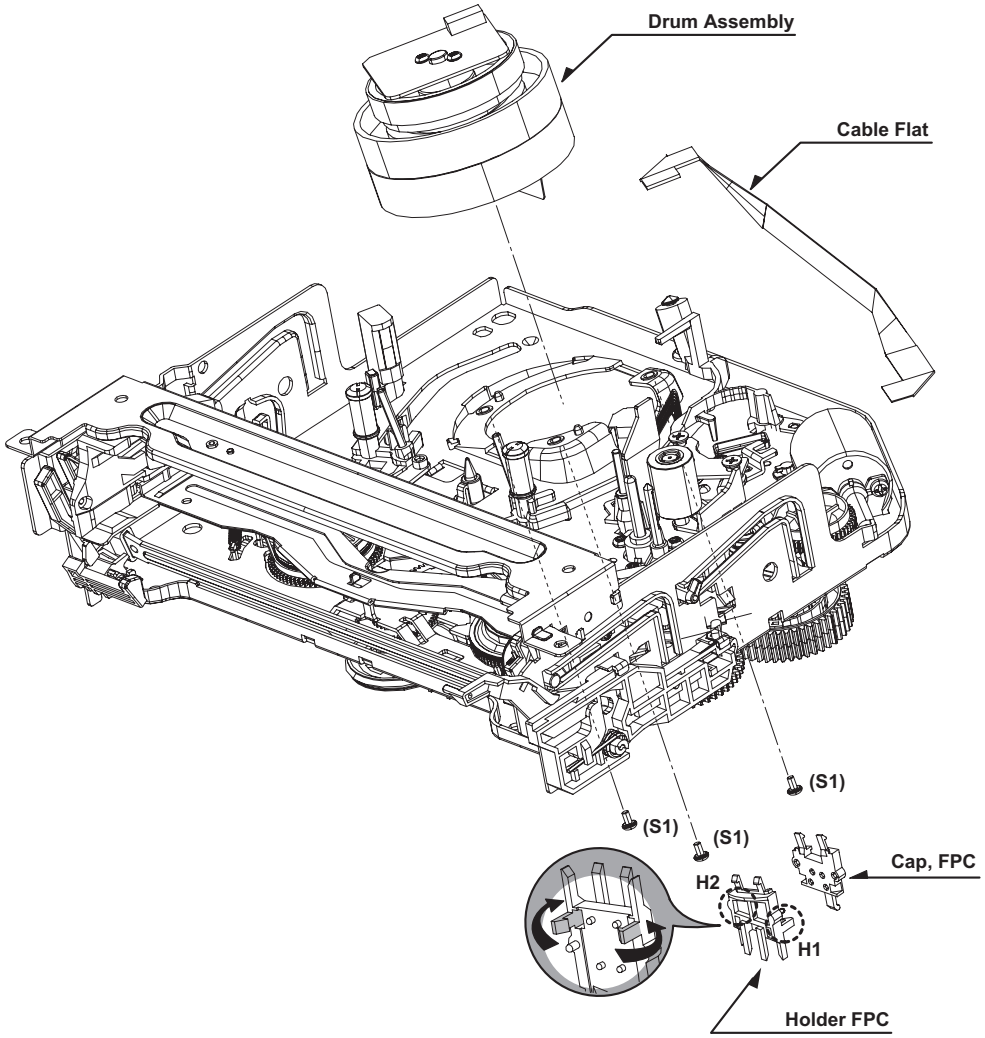
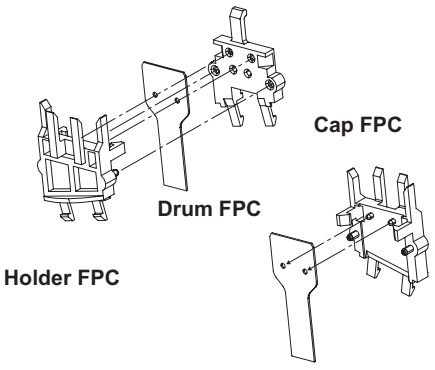


Fig. A-1

1. Disassembly of Drum Assembly (Figure A-1)

1) Separate cable flat from the Drum FPC and the Capstan Motor.
2) Release 3 screws (S1) on the bottom side of the chassis, and separate the drum assembly.
3) Release the hooks (H1, H2) and separate both the holder FPC and the Cap FPC (disassemble if necessary).

Cautions in assembly of FPC



Assembly shape seen in the reverse direction

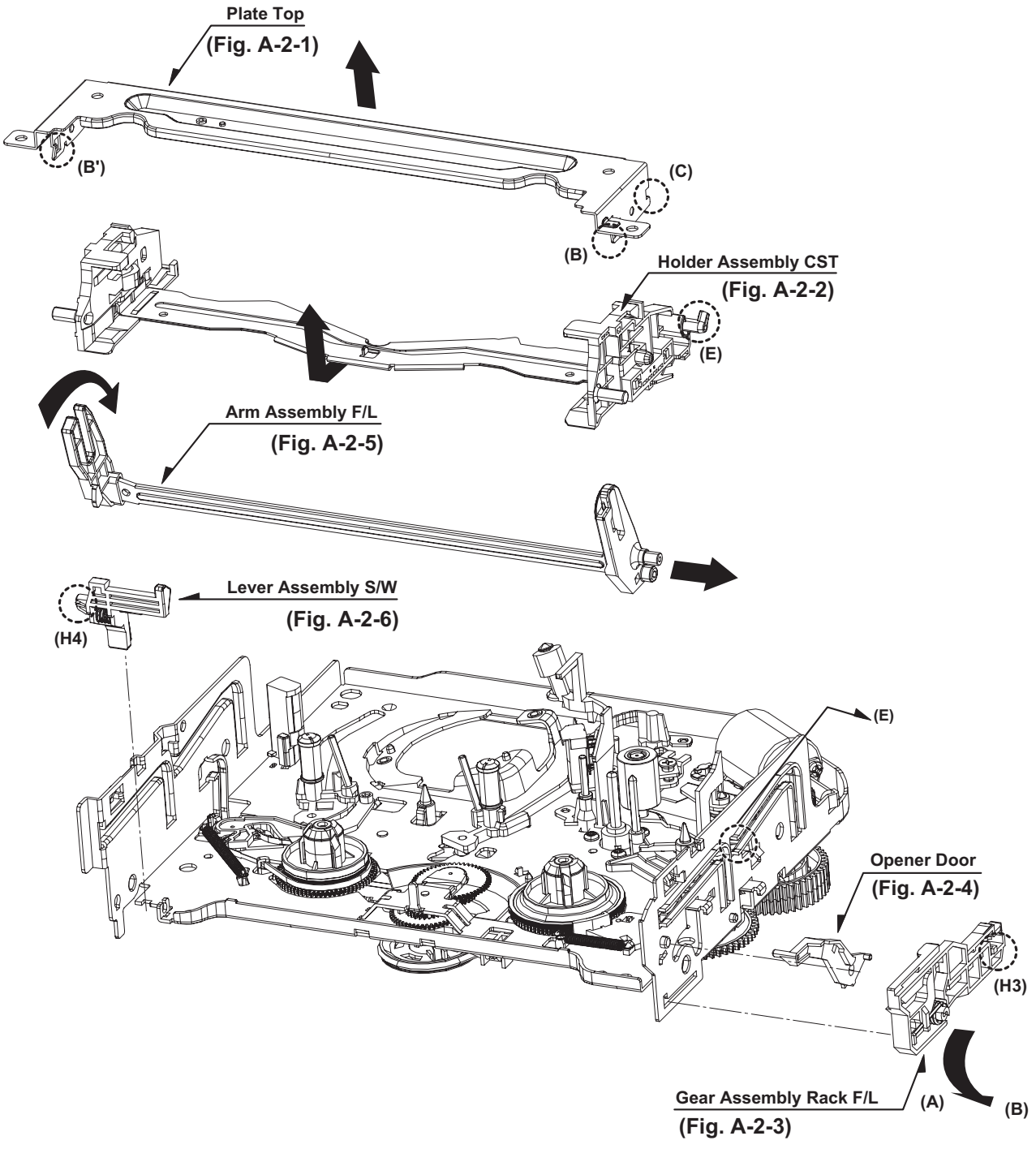


Plate Top
(Fig. A-2-1)
(B')
(C)
(B)
Holder Assembly CST
(Fig. A-2-2)
(E)
Arm Assembly F/L
(Fig. A-2-5)
Lever Assembly S/W
(Fig. A-2-6)
(H4)
(E)
Opener Door
(Fig. A-2-4)
(H3)
Gear Assembly Rack F/L
(Fig. A-2-3)
(A)
(B)

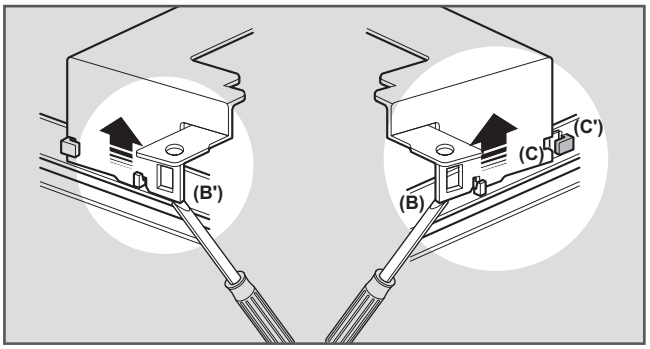
Fig. A-2

2. Disassembly of Plate Top (Fig.A-2-1)

1) Separate the right part while leaning back the (B) part of the plate top toward the arrow direction.
2) Separate the left part while leaning back the (B') part of the plate top toward the arrow direction.
(Tool used:Tool such as (-) driver, auger, etc with pointed or flat end)

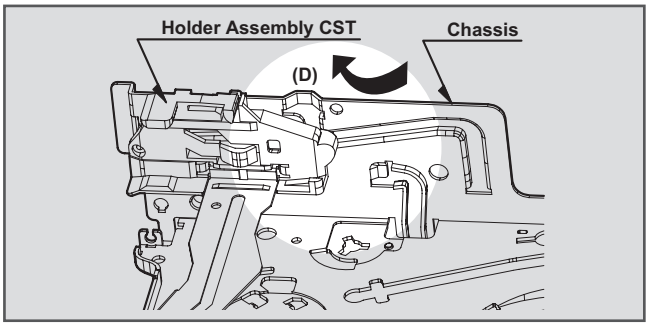
CAUTIONS

Assemble while pressing the (C), (C') part after corresponding them as in drawing.



3. Holder Assembly CST (Fig.A-2-2)

1) Firstly separate the left part from the groove on the (D) part of chassis while moving the holder assembly CST toward the arrow direction.



2) Separate the right part from each groove of chassis

CAUTIONS

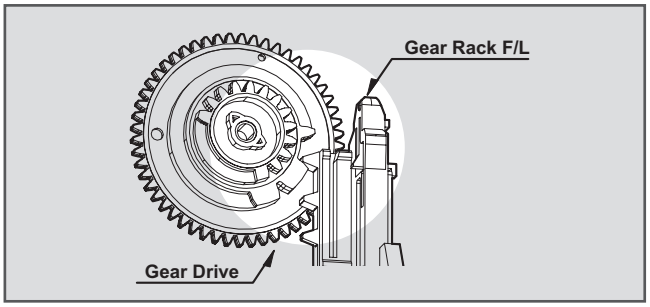
Assemble by inserting the left part after firstly inserting the (E) part of the holder assembly CST into the groove on the (E') part of chassis.

4. Disassembly of Gear Assembly Rack F/L(Fig.A-2-3)

1) Separate the hook (H3) while leaning ahead the hook (3) after moving the gear assembly rack F/L toward the arrow (A) direction.
2) Separate the gear assembly rack F/L toward the arrow (B) direction.

CAUTIONS

For the assembly, correspond the gear part of gear assembly rack F/L to the gear drive.



5. Opener Door (Fig.A-2-4)

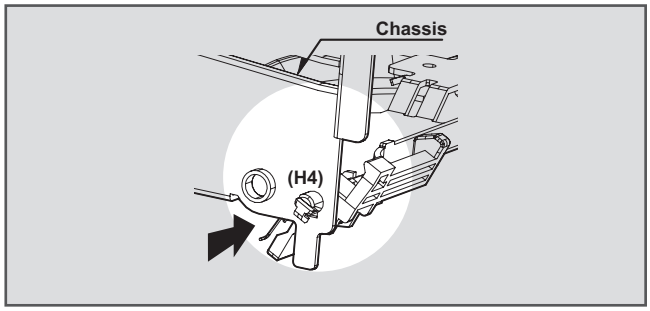
1) Separate the opener door ahead from the guide hole of chassis while turning it clockwise.

6. Arm Assembly F/L (Fig. A-2-5)

1) Firstly separate the left part of the arm assembly F/L from the groove of chassis while pushing the arm assembly F/L toward the arrow direction.
2) Separate the right part from the groove of chassis.).

7. Lever Assembly S/W (Fig.A-2-6)

1) Separate the lever assembly S/W while pushing it toward the arrow direction after removing the hook (4) on the left side of chassis.



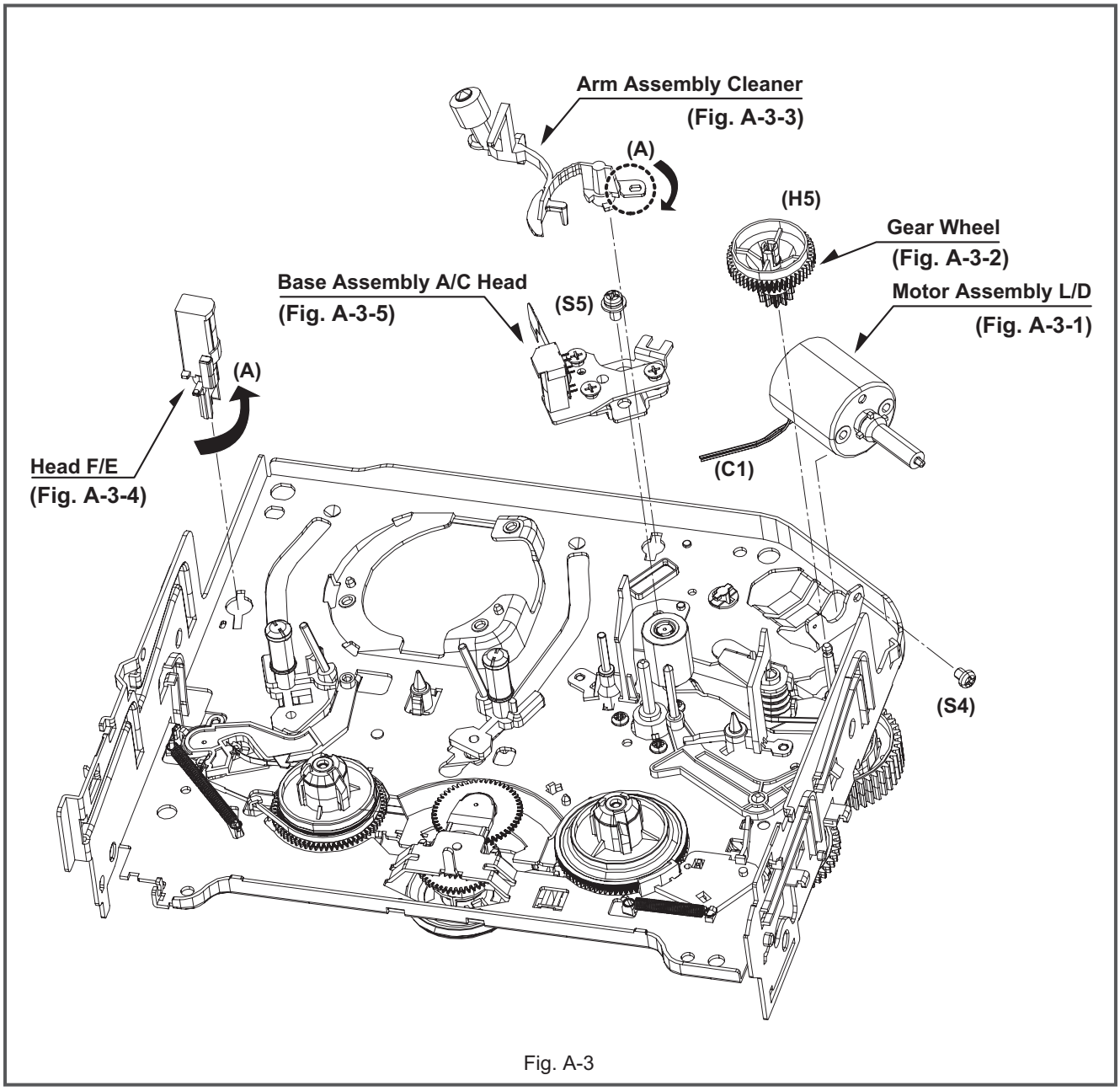


Fig. A-3

8. Motor Assembly L/D (Fig. A-3-1)

1) Take the connector (C1) connected to the Capstan motor PCB out.
2) Remove a screw (S4) of the chassis (S4) and step backward, and disassemble it while holding it up.

9. Gear Wheel (Fig. A-3-2)

1) Release the hook (H5) of the gear wheel and disassemble it upward.

10. Arm Assembly Cleaner (Fig. A-3-3)

1) Separate the (A) part of Fig. A-3-1 from the embossing of chassis, and hold it up while turning it anti-clockwise.

11. Head F/E (Fig. A-3-4)

1) Separate the (A) part of the head F/E from the embossing of chassis, and hold it up while turning it anti-clockwise.

12. Base Assembly A/C Head (Fig. A-3-5)

1) Release a screw (S5) and disassemble while holding it up.

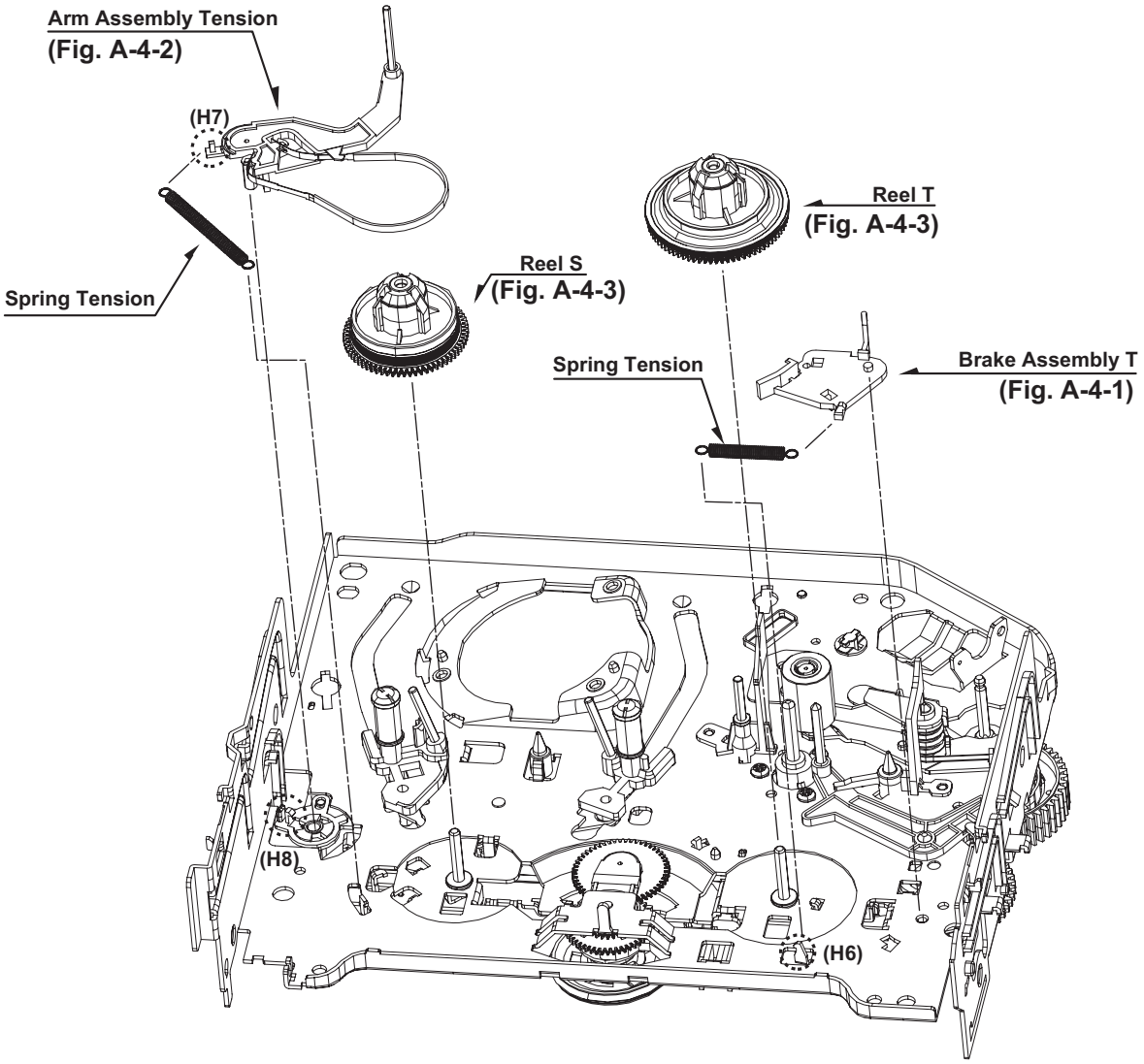


Fig. A-4

13. Brake Assembly T (Fig. A-4-1)

1) Release the spring tension from the lever spring hook (H6).
2) Disassemble the brake assembly T while holding it upward.

14. Arm Assembly Tension (Fig. A-4-2)

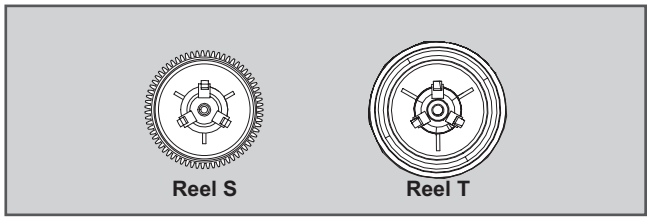
1) Release the spring tension the hook (H7) from the arm assembly tension.
2) After releasing the hook (H8) of the base tension, separate it while holding it up.

CAUTIONS

Spring used for both brake assembly T and arm assembly tension is used (2EA used).

15. Reel S/Reel T (Fig. A-4-3)

1) Disassemble the reel S/ reel T while holding it up (comparison between Reel S and Reel T)



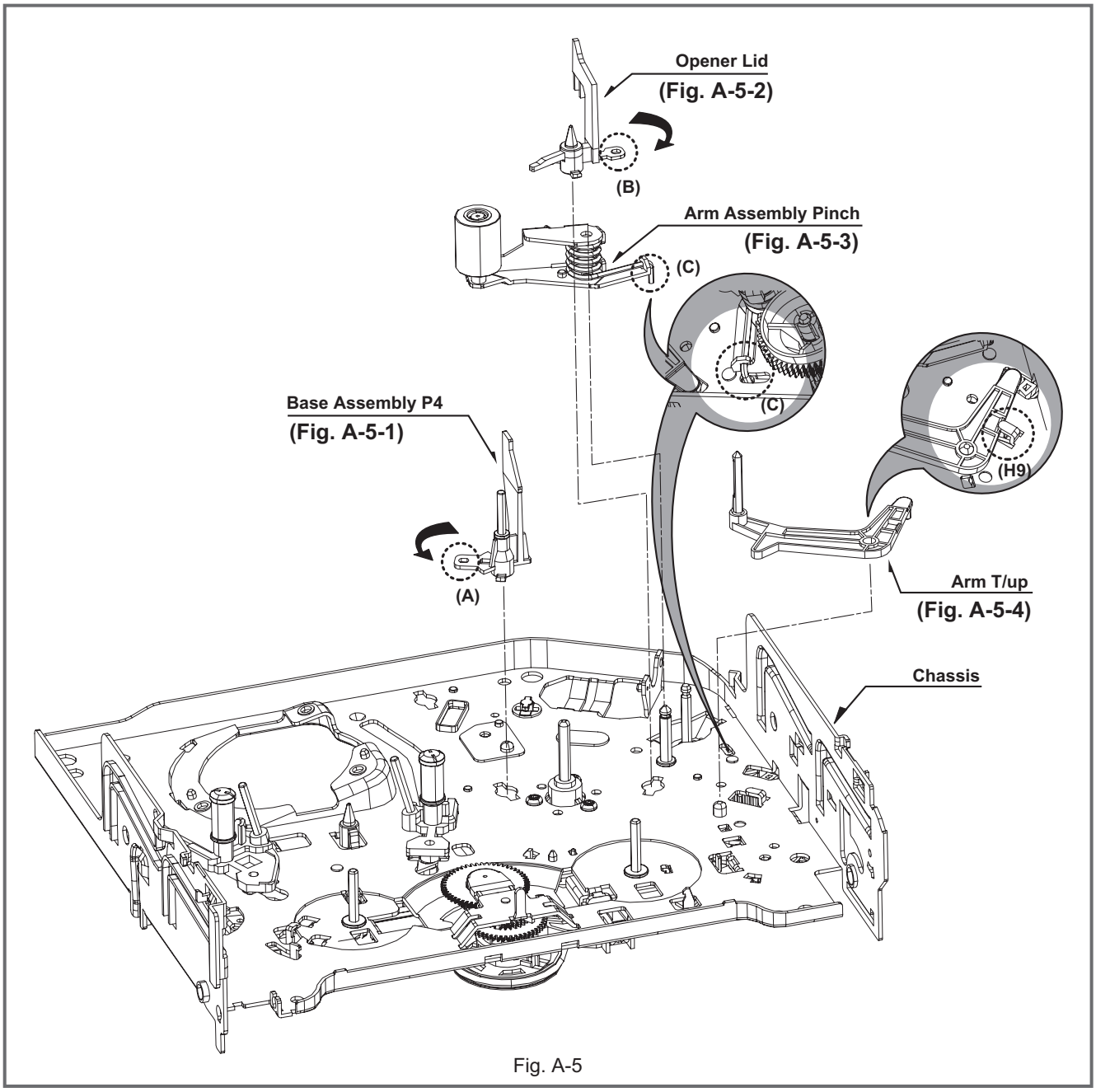


Fig. A-5

16. Base Assembly P4 (Fig. A-5-1)

1) Release the (A) part of the base assembly P4 from the embossing of chassis.
2) Hold the base assembly P4 up while turning it anti-clockwise.

17. Opener Lid (Fig. A-5-2)

1) Release the (B) part of the opener lid from the embossing of chassis.
2) Disassemble the opener lid upward while turning it anticlockwise.

18. Arm Assembly Pinch (Fig. A-5-3)

1) Hold the arm assembly pinch up.

19. Arm T/up (Fig. A-5-4)

1) Turn the arm T/up to release the anchor jaw (H9) part of chassis and then hold it upward.

CAUTIONS

For the assembly, check the (C) part of the arm assembly pinch is assembled as in drawing.

- REVERSE THE MECHANISM.

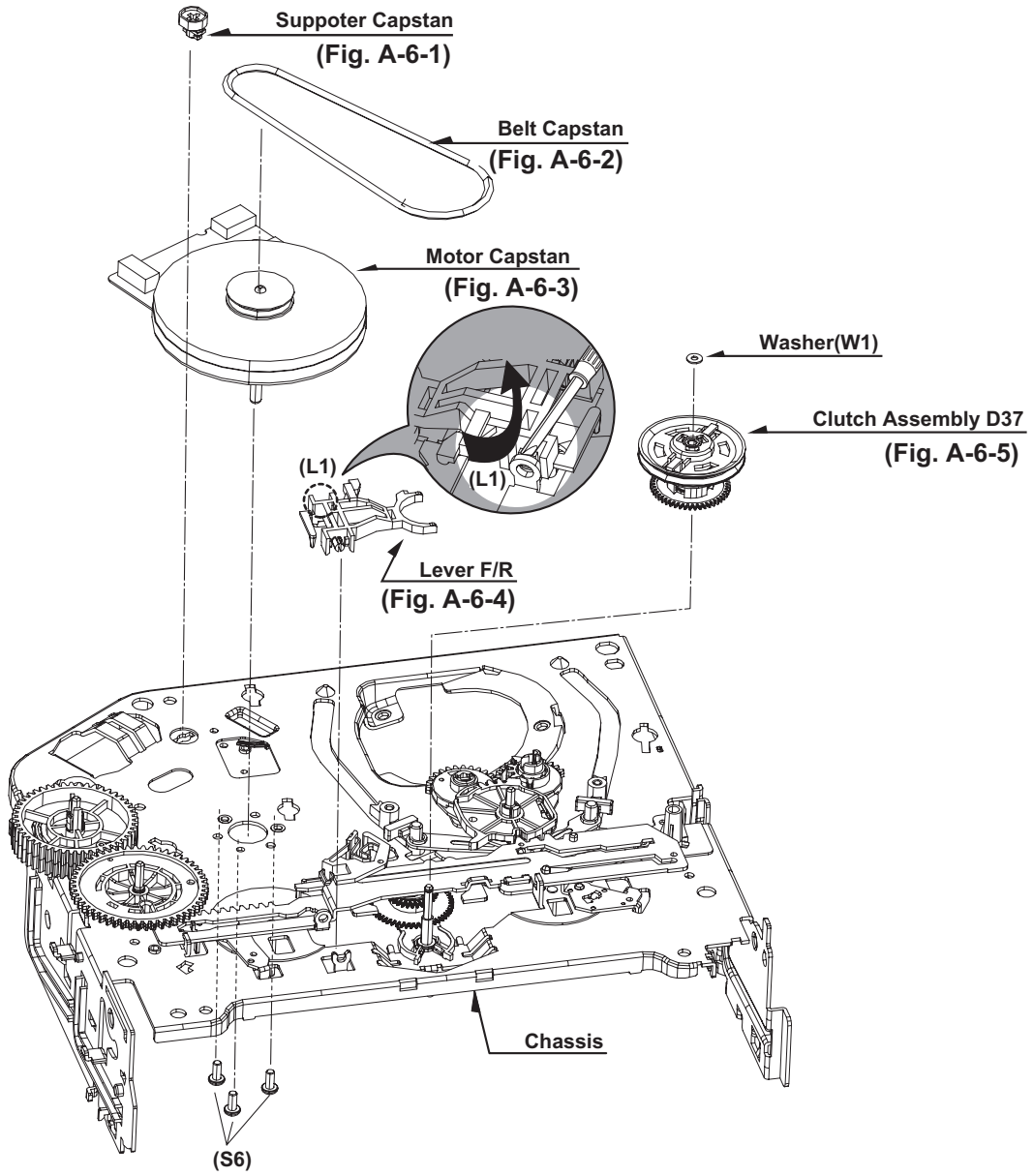


Fig. A-6

20. Supporter, Capstan (Fig. A-6-1)

1) Turn the supporter and Capstan by 90 deg. clockwise with a driver for disassembly.

21. Belt Capstan (Fig. A-6-2) / Motor Capstan (Fig. A-6-3)

1) Separate the belt Capstan.
2) Undo 3 screws (S6) on the bottom side of chassis and disassemble it upward.

22. Lever F/R (Fig. A-6-4)

1) Release the locking tab (L1) and then disassemble it upward.

23. Clutch Assembly D37 (Fig. A-6-5)

1) Remove the washer (W1) and then disassemble it upward.

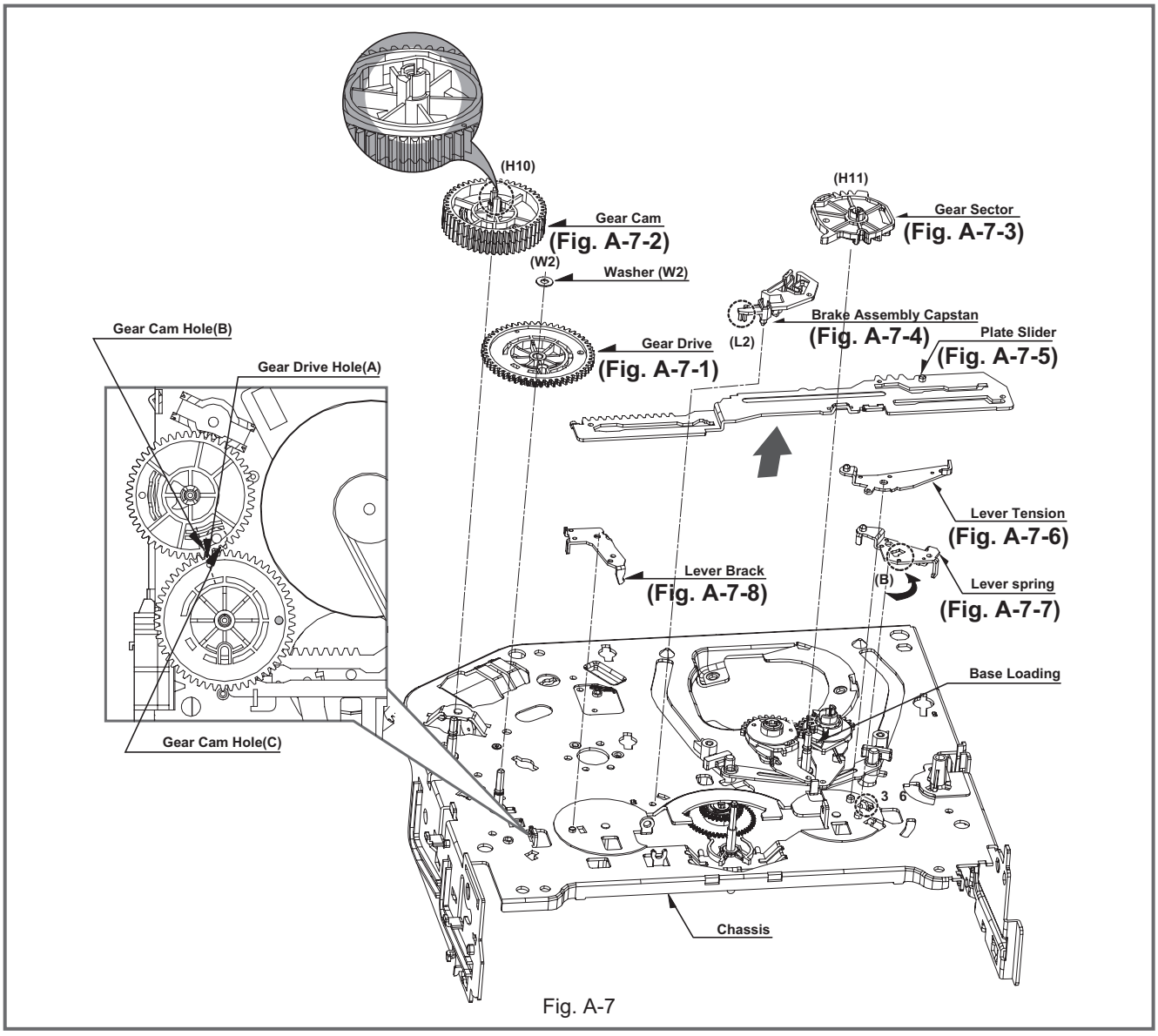


Fig. A-7

24. Gear Drive (Fig. A-7-1)/Gear Cam (Fig. A-7-2)

1) Remove the washer (W2) and then disassemble the gear drive.
2) Release the hook (H10) of the gear cam and then disassemble it upward.

CAUTIONS

For the assembly, adjust both the gear driver hole (A) and the gear cam hole (B) straightly and then correspond the gear cam hole (C) to the chassis hole.

25. Gear Sector (Fig. A-7-3)

1) Release the hook (H11) of the gear sector and then hold the gear sector upward.

26. Brake Assembly Capstan (Fig. A-7-4)

1) Release the locking tab (L2) on the bottom side of the plate slider and then disassemble it upward.

27. Plate Slider (Fig. A-7-5)

1) Disassemble the plate slider while holding it up.

28. Lever Tension (Fig. A-7-6)

1) Release the lever tension from the guide (A) of chassis while turning it anti-clockwise.
2) Disassemble the lever tension while holding it up.

29. Lever Spring (Fig. A-7-7)

1) Release the (B) part of the lever spring from the guide (A) of chassis while turning it anti-clockwise.
2) Disassemble the lever tension while holding it up.

30. Lever Brake (Fig. A-7-8)

1) Disassemble the lever brake while holding it up.

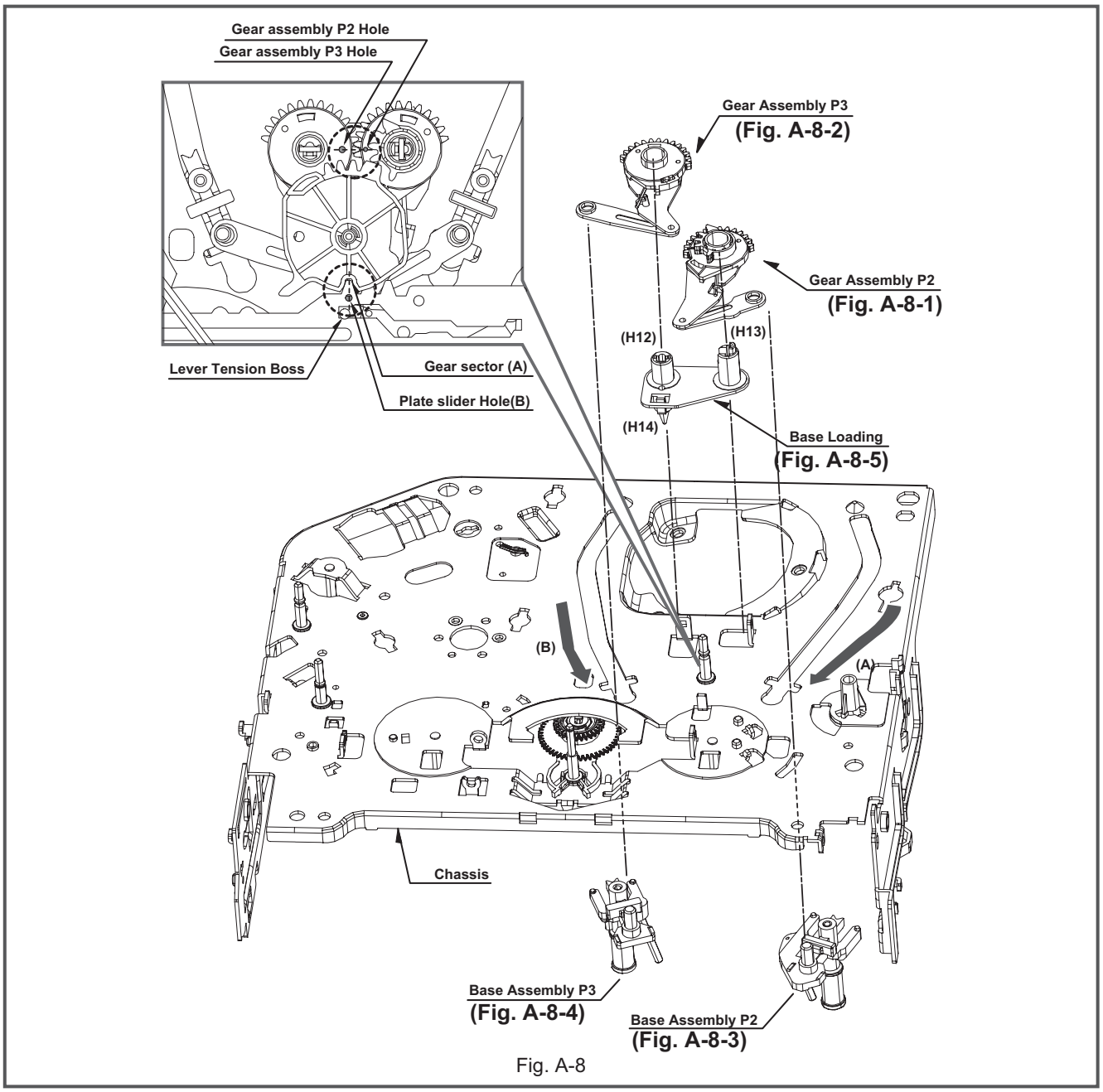


Fig. A-8

31. Gear Assembly P2 (Fig. A-8-1)/ Gear Assembly P3 (Fig. A-8-2)

1) Hold the gear assembly P2 upward.
2) Hold the gear assembly P3 upward.

CAUTIONS

For the assembly, check the holes of both the gear assembly P2 and the P3 are adjusted straightly, and then correspond the gear section groove (A) to the plate slider hole (B).

32. Base Assembly P2 (Fig. A-8-3)/ Base Assembly P3 (Fig. A-8-4)

1) Disassemble the base assembly P2 downward while moving it toward the arrow (A) direction along with the guide hole of chassis.
2) Disassemble the base assembly P2 downward while moving it toward the arrow (B) direction along with the guide hole of chassis.

33. Base Loading (Fig. A-8-5)

1) Release 3 hooks (H12, 13, 14) of the base loading, and then disassemble them upward.

- Reverse the mechanism.

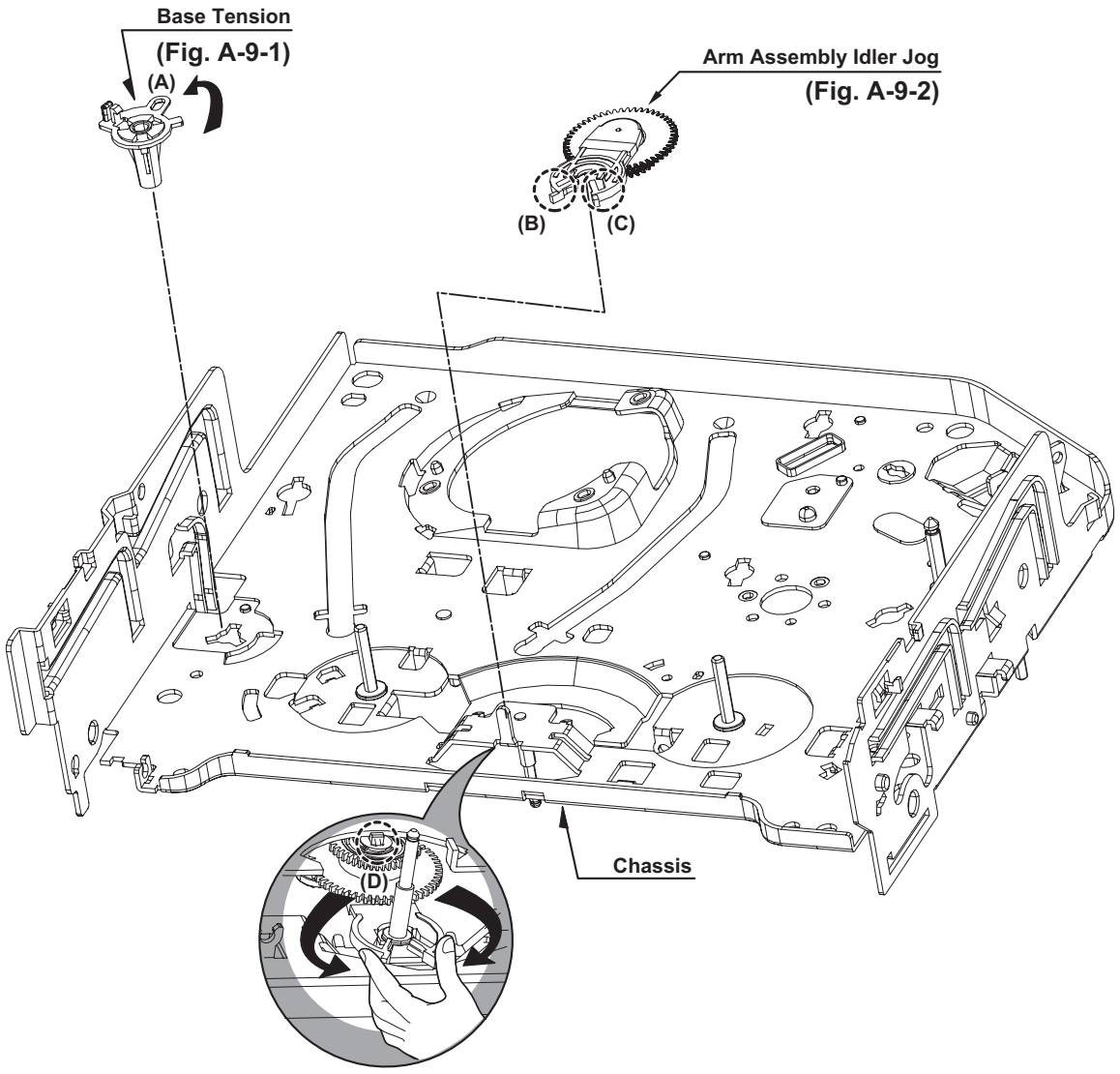


Fig. A-9

34. Base Tension (Fig. A-9-1)

1) Release the (A) part of the base tension from the embossing of chassis.
2) Hold the base tension upward while turning it anti-clockwise.

35. Arm assembly Idler Jog (Fig. A-9-2)

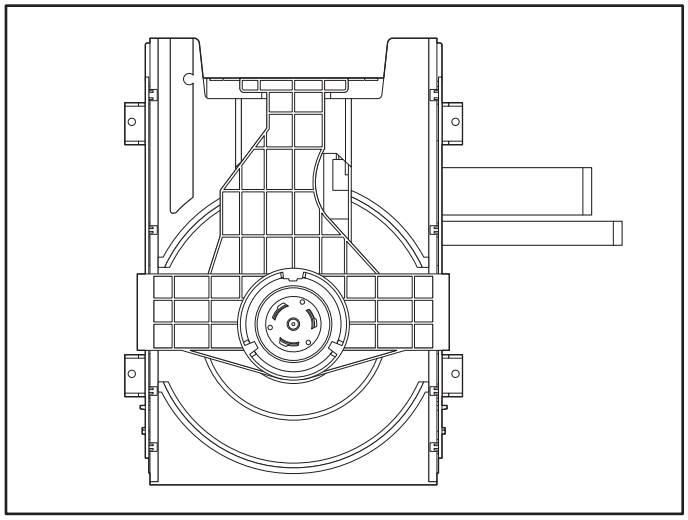
1) Push both (B), (C) parts in Fig. A-9-2 toward the arrow direction.
2) Disassemble the arm assembly idler upward.

CAUTIONS

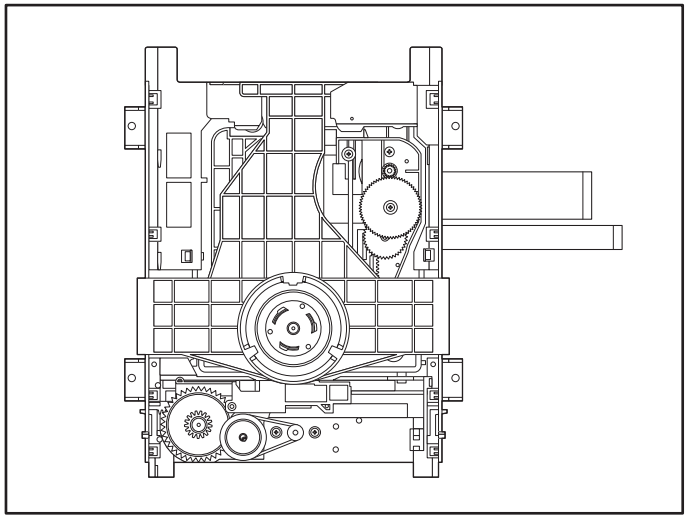
Take care to ensure that the (D) part in the drawing is not hung to chassis in disassembly.

3.3 DVD MECHANISM PARTS LOCATION

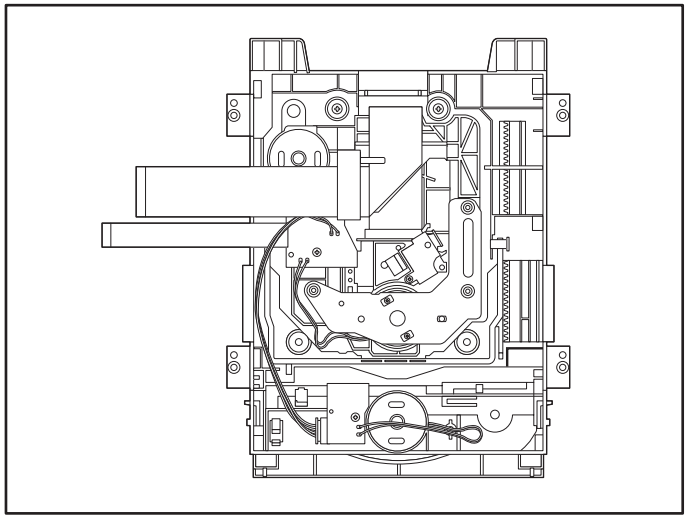
Top View (With Tray)



Top View (Without Tray)



Bottom View



Procedure Starting No.		Parts	Fixing Type	Disassembly	Figure
	1	Main Base			5-1
1	2	Clamp Assembly Disc			5-1
1, 2	3	Plate Clamp			5-1
1, 2, 3	4	Magnet Clamp			5-1
1, 2, 3, 4	5	Clamp Upper			5-1
1	6	Tray Disc			5-2
1, 6	7	Base Assembly Sled			5-3
1, 2, 6	8	Gear Feed	4 Screws, 1 Connector 1 Locking Tabs		5-3
1, 2, 6, 8	9	Gear Middle			5-3
1, 2, 6, 8, 9	10	Gear Rack	1 Screw		5-3
1, 2, 7	11	Rubber Rear			5-3
1, 2, 7	12	Frame Assembly Up/Down	1 Screw	Bottom	5-4
1, 2	13	Belt Loading	1 Locking Tab		5-4
1, 2 ,13	14	Gear Pulley			5-4
1, 2, 13, 14	15	Gear Loading	1 Locking Tab		5-4
1, 2, 7, 12, 13, 14	16	Guide Up/Down			5-4
1, 2, 13	17	PWB Assembly Loading	1 Locking Tab 1 Hook 2Screw	Bottom	5-4
1, 2, 7, 12, 13, 14, 15, 16, 17	18	Base Main	2 Locking Tabs		5-4

Note

When reassembling, perform the procedure in reverse order.

The "Bottom" on Disassembly column of above Table indicates the part should be disassembled at the Bottom side.

3.4 DVD MECHANISM DISASSEMBLY

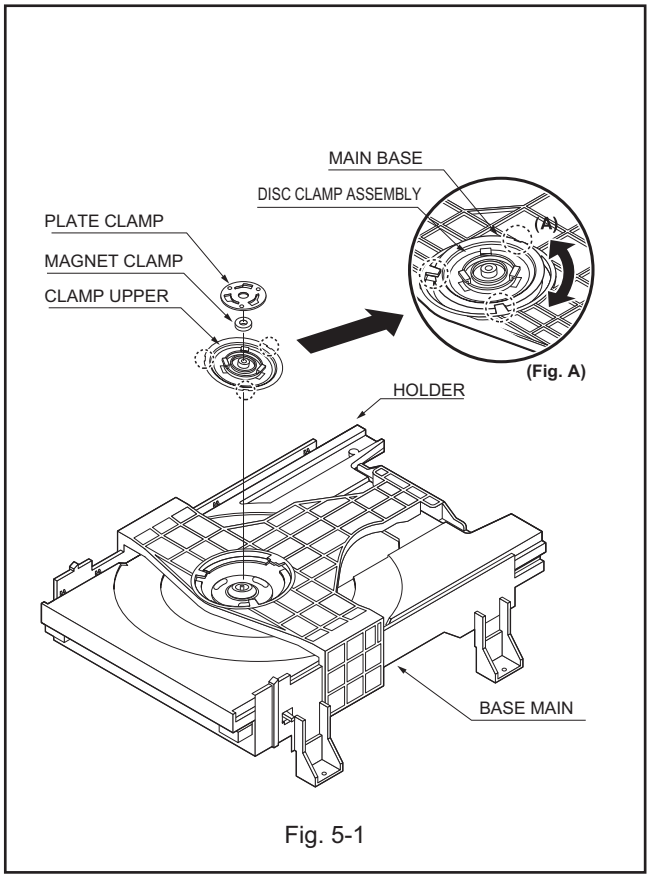


Fig. 5-1

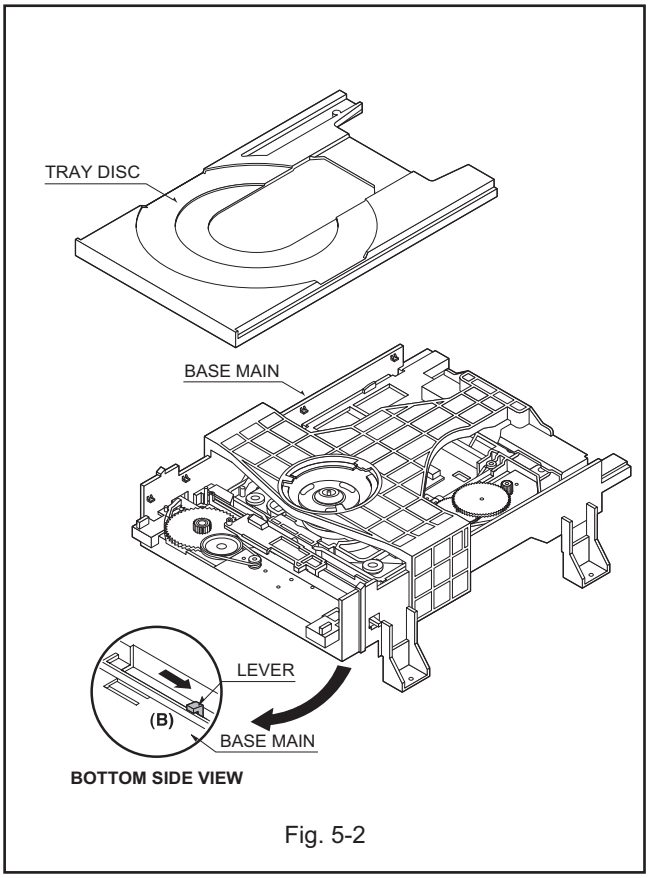


Fig. 5-2

1.Main Base (Fig. 5-1)

1-1. Clamp Assembly Disc

1) Place the Clamp Assembly Disc as Fig. (A)
2) Lift up the Clamp Assembly Disc in direction of arrow(A).
3) Separate the Clamp Assembly Disc from the Holder Clamp.

1-1-1. Plate Clamp

1) Turn the Plate Clamp to counterclockwise direction and then lift up the Plate Clamp.

1-1-2. Magnet Clamp

1-1-3.Clamp Upper

2. Tray Disc (Fig. 5-2)

1) Insert and push a Driver in the emergency eject hole(A) at the right side, or put the Driver on the Lever(B) of the Gear Emergency and pull the Lever(B) in direction of arrow so that the Tray Disc is ejected about 15~20mm.
2) Pull the Tray Disc until it is separated from the Base Main completely.

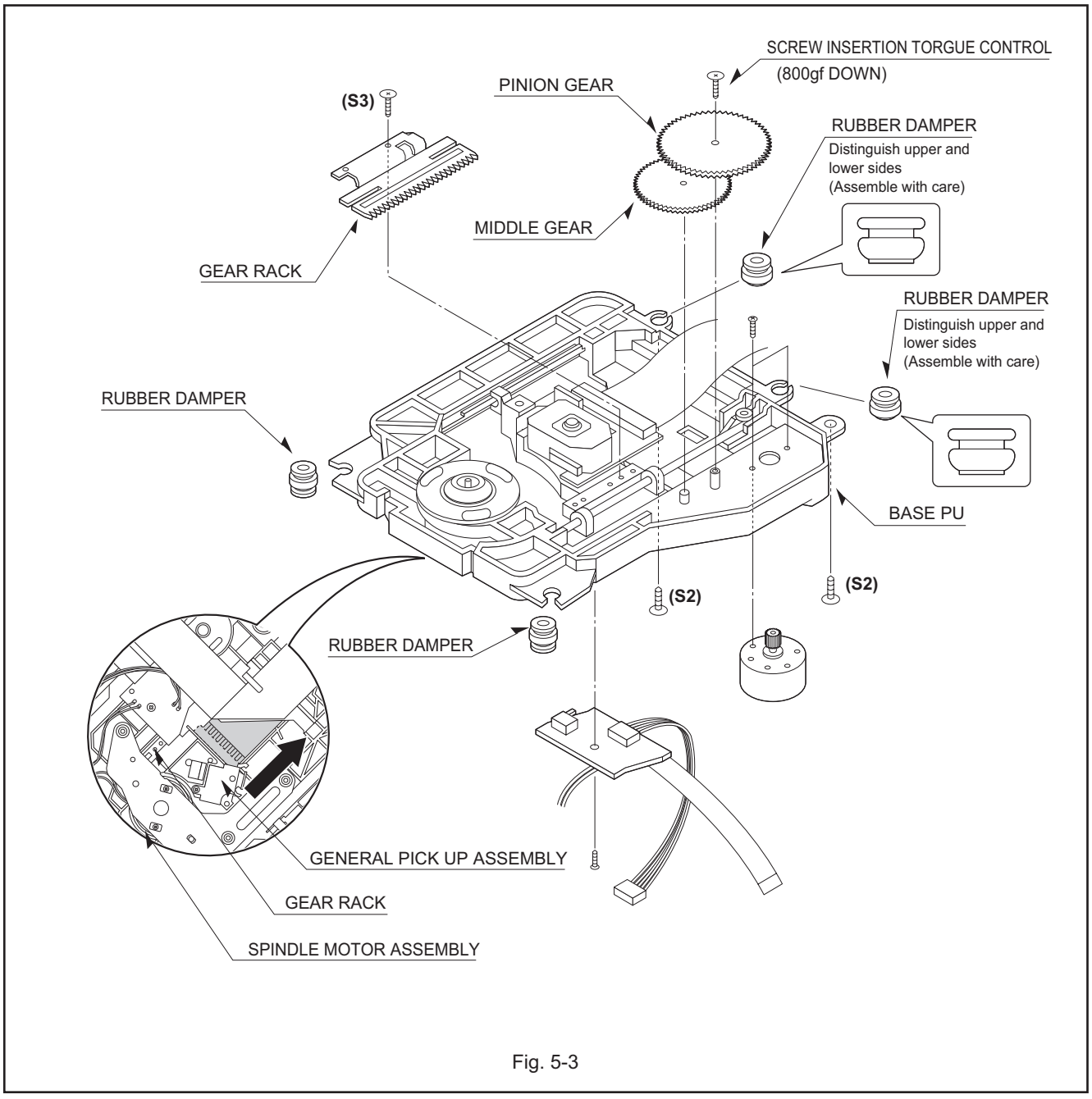


Fig. 5-3

3.Base Assembly Sled (Fig. 5-3)

1) Release 4 Screw(S2).
2) Disconnect the FFC Connector(C1)

3-1. Gear Feed

3-2. Gear Middle

3-3. Gear Rack

1) Release the Scerw(S3)

4. Rubber Rear (Fig. 5-3)

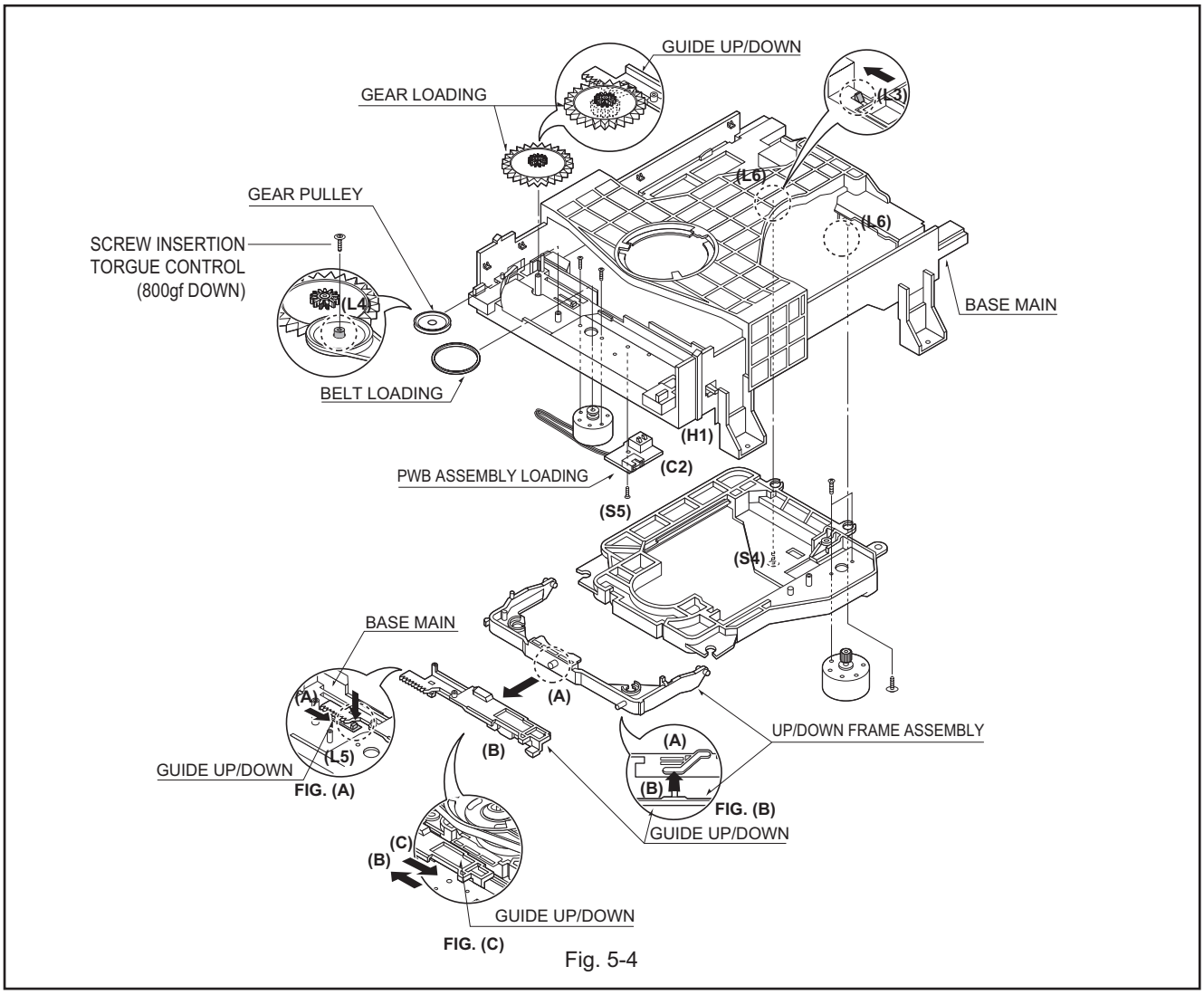


Fig. 5-4

5. Frame Assembly Up/Down (Fig. 5-4)

Note

Put the Base Main face down(Bottom Side)

1) Release the screw(S4)
2) Unlock the Locking Tab(L3) in direction of arrow and then lift up the Frame Assembly Up/Down to separate it from the Base Main.

Note

- When reassembling move the Guide Up/Down in direction of arrow(C) until it is positioned as Fig.(C).
- When reassembling insert (A) portion of the Frame Assembly Up/Down in the (B) portion of the Guide Up/Down as Fig.(B)

6. Belt Loading(Fig. 5-4)

Note

Put the Base Main on original position(Top Side)

7. Gear pulley (Fig. 5-4)

1) Unlock the Locking Tab(L4) in direction of arrow(B) and then separate the Gear Pulley from the Base Main.

8. Gear Loading (Fig. 5-4)

9. Guide Up/Down (Fig. 5-4)

1) Move the Guide Up/Down in direction of arrow(A) as Fig.(A)
2) Push the Locking Tab(L5) down and then lift up the Guide Up/Down to separate it from the Base Main.

Note

When reassembling place the Guide Up/Down as Fig.(C) and move it in direction arrow(B) until it is locked by the Locking Tab(L5). And confirm the Guide Up/Down as Fig.(A)

10. PWB Assembly Loading (Fig. 5-4)

Note

Put the Base Main face down(Bottom Side)

1) Release 1 Screws(S5)
2) Unlock the Loading Motor (C2) from the Hook (H1) on the Base Main.
3) Unlock 2 Locking Tabs(L6) and separate the PWB Assembly Loading from the Base Main.

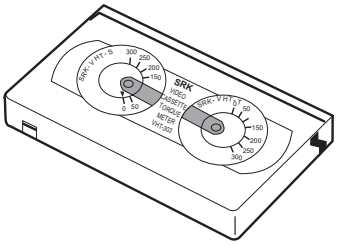
11. Base Main(Fig. 5-4)

SECTION 4
ADJUSTMENT

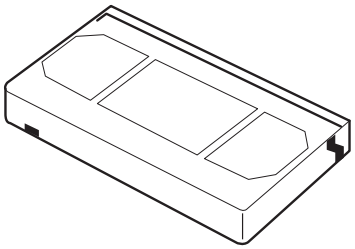
4.1 DECK MECHANISM ADJUSTMENT (VCR)

4.1.1 Tools and Fixfures for Service

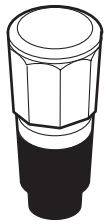
1. Cassette Torque Meter
PUJ42881



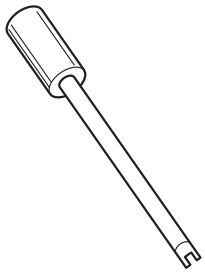
2. Alignment Tape
NTSC: MHP
PAL: MHPE



3. Torque Gauge
PUJ48075-2



5. Post Height Adjusting Driver
(Roller driver)
PTU94002

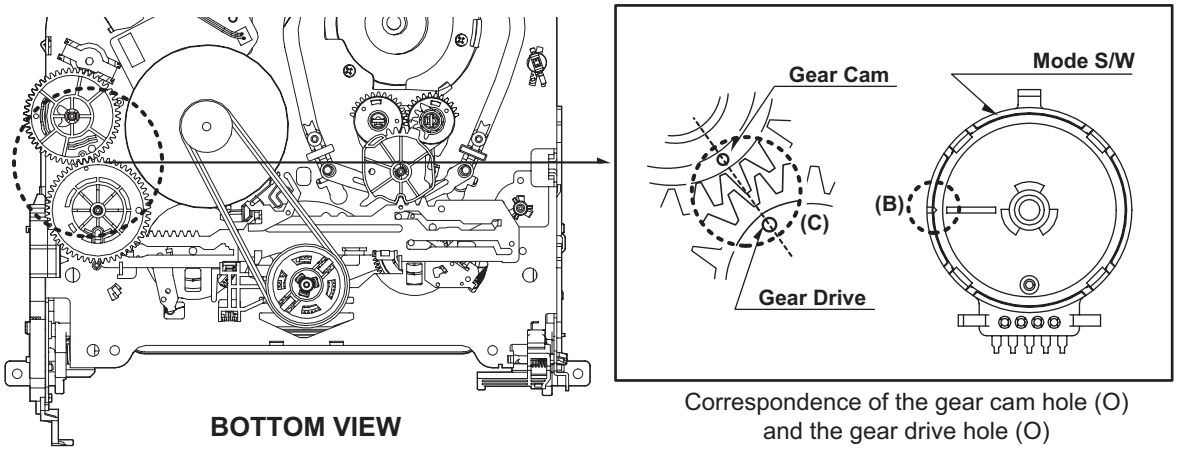


4.1.2 Mechanism Assembly Mode Check

Purpose of adjustment : To make tools normally operate by positioning tools accurately.		
Fixtures and tools used	**VCR (VCP) status**	**Checking Position**
• Blank Tape (empty tape)	• Eject Mode (with cassette withdrawn)	• Mechanism and Mode Switch

1) Turn the VCR on and take the tape out by pressing the eject button.
2) Separate both top cover and plate top, and check both the hole (A) of gear cam and the hole (A') of chassis correspond (Fig. C-2).
3) If it is done as in the paragraph 2): Turn the gear cam as in No.2) after mantling the motor assembly L/D.
4) Undo the screw fixing the deck and the main frame, and separate the deck assembly. Check both the hole (A) of gear cam and the hole (A') of chassis correspond (Fig. C-1).
5) Check the mode S/W on the main P.C. board locates at a proper position as in (B) of the Fig. (C-1).
6) Connect the deck to the main P.C. board and perform all types of test.

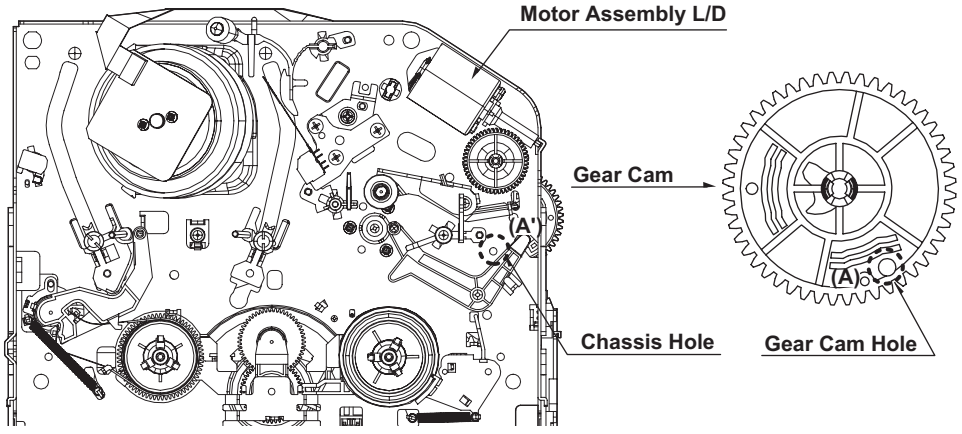
CHECK DIAGRAM



BOTTOM VIEW

Correspondence of the gear cam hole (O) and the gear drive hole (O)

Fig. C-1



TOP VIEW

Fig. C-2

4.1.3 Previous Preparation for Deck Adjustment

(Preparation to load the VCR (VCP) with cassette tape not inserted)

(1) Take the power cord from the consent.
(2) Separate the top cover and the plate assembly top.
(3) Insert the power cord into again.
(4) Turn the VCR (VCP) on and load the cassette while pushing the lever stopper of the holder assembly CST backward. In this case, clog both holes on the housing rail part of chassis to prevent detection of the end sensor.

If doing so, proceeding to the stop mode is done. In this status, input signals of all modes can be received. However, operation of the Rewind and the Review is impossible since the take-up reel remains at stop status and so cannot detect the reel pulse (however, possible for several seconds).

4.1.4 Torque Measuring

Purpose of Measuring : To measure and check the reel torque on the take-up part and the supply part that performs basic operation of the VCR (VCP) for smoothly forwarding the tape.
Measure and check followings when the tape is not smoothly wound or the tape velocity is abnormally proceeded:

Fixtures and tools used	VCR (VCP) status	Measuring method
・Torque Gauge (600 g.cm ATG) ・Torque Gauge Adaptor ・Cassette Torque Meter	・Play (FF) or Review (REW) Mode	・Try to operate the VCR (VCP) per mode with the tape not inserted (See 4.3.3 Prior Preparation for Deck Adjustment). ・Measure after adhering and fixing the torque gauge adaptor to the torque gauge (Fig. C-3-1) ・Read scale of the supply or take-up part of the cassette torque meter (Fig. C-3-2).

Item	Mode	Instruments	Reel Measured	Measuring Value
Fast forward Torque	Fast Forward	Torque Gauge	Take-Up Reel	More than 400g˚cm
Rewind Torque	Rewind	Torque Gauge	Supply Reel	More than 400g˚cm
Play Take-Up Torque	Play	Cassette Torque Meter	Take-Up Reel	40~100g˚cm
Review Torque	Review	Cassette Torque Meter	Supply Reel	40~210g˚cm

NOTE

Adhere the torque gauge adaptor to the torque gauge for measuring the value.

・Torque Gauge (600g.cm ATG)

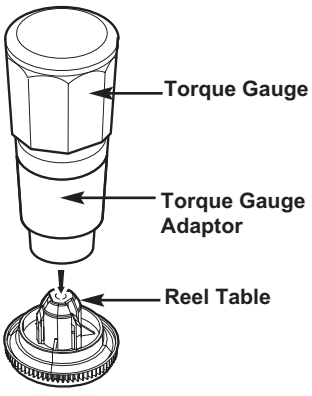


Fig. C-3-1

・Cassette Torque Meter

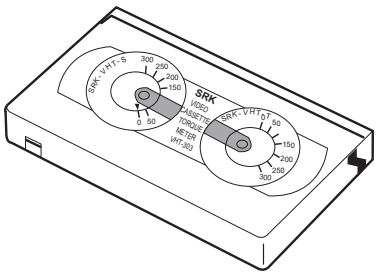


Fig. C-3-2

4.1.5 Guide Roller Height Adjustment

Purpose of adjustment : To ensure that the bottom surface of the tape can travel along with the tape lead line of the lower drum by constantly and adjusting and maintaining the height of the tape.

4.1.5.1 Prior Adjustment

Fixtures and tools used	VCR (VCP) status	Adjustment position
• Post Height Adjusting Driver	• Play or Review Mode	• The guide roller height adjusting screw on the supply guide roller and the take-up guide roller

Adjustment Procedure

1) Travel the tape and check the bottom surface of the tape travels along with the guide line of the lower drum.
2) If the tape travels toward the lower part of guide line on the lower drum, turn the guide roller height adjusting screw to the left
3) If it travels to the upper part, turn it to the right.
4) Adjust the height of the guide roller to ensure that the tape is guided on the guide line of the lower drum at the inlet/outlet of the drum. (Fig. C-4-1)

ADJUSTMENT DIAGRAM

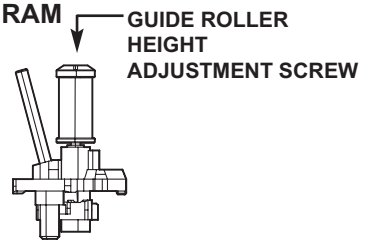


Fig. C-4-1

4.1.5.2 Fine Adjustment

Fixtures and tools used	Measuring tools and connection position	VCR (VCP) status	Adjustment position
• Oscilloscope • Alignment tape • Post height adjusting driver	• CH-1: PB RF Envelope • CH-2: NTSC : SW 30Hz PAL : SW 25Hz • Head switching output point • RF Envelope output point	• Play the standard test tape.	• Guide roller height adjusting screw

1) Play the Alignment tape after connecting the probe of oscilloscope to the RF envelope output point and the head switching output point.
2) Tracking control (playback) : Locate it at the center (Set the RF output to the maximum value via the tracking control when such adjustment is completed after the drum assembly is replaced.)
3) Height adjusting screw: Flatten the RF waveform. (Fig. C-4-2)
4) Move the tracking control (playback) to the right/left. (Fig. C-4-3)
5) Check the start and the end of the RF output reduction width are constant.

CAUTIONS

There must exist no crumpling and folding of the tape due to excess adjustment or insufficient adjustment.

Waveform

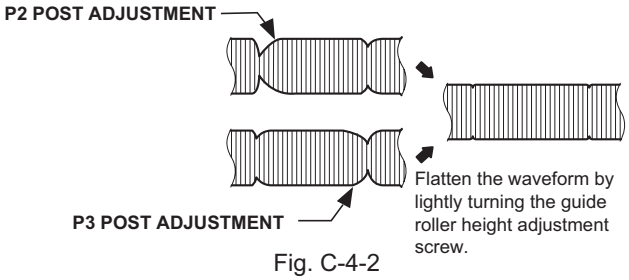

P2 POST ADJUSTMENT
P3 POST ADJUSTMENT
Flatten the waveform by lightly turning the guide roller height adjustment screw.

Fig. C-4-2

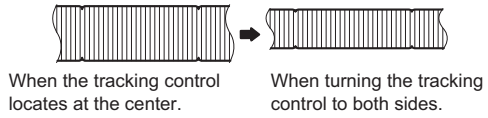
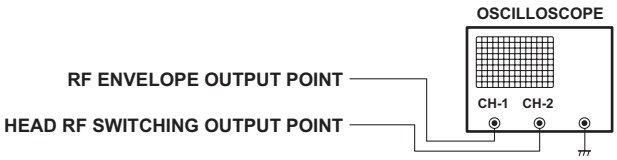


Fig. C-4-2

Connection Diagram



4.1.6 Audio/Control (A/C) Head Adjustment

Purpose of adjustment : To ensure that audio and control signals can be recorded and played according to the contract tract by constantly maintaining distance between tape and head, and tape tension between the P3 post and the P4 post.

4.1.6.1 Prior Adjustment (performed only when no audio output appears in play of the standard test tape)

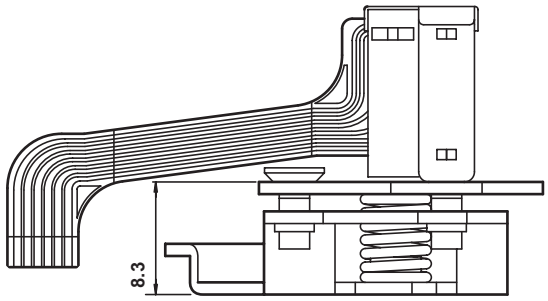
Fixtures and tools used	VCR (VCP) status	Adjustment position
• Blank Tape • Driver (+) Type 5mm	• Play the blank tape	• Tilt adjusting screw (C) • Height adjusting screw (B) • Azimuth adjusting screw (A)

Adjustment Procedure/Adjustment Diagrams

1) Basically use the A/C head assembly adjusted as in SPEC.
2) Check there is crumpling and folding of the tape around the A/C head. If it is, Turn and adjust the tilt adjusting screw to ensure that the tape corresponds to the bottom guide of the P4, and recheck the tape path after proceeding play for 4-5 seconds.
3) Where the tape bottom is not equal to Fig. C-5-3, Adjust the height by using the height adjusting screw (B) and then readjust it by using the tilt adjusting screw (C).

CAUTIONS

Always check the height of the A/C head since most ideal height of A/C head can be obtained when the bottom part of the tape is away 0.2 ~ 0.25mm from the bottom part of the A/C head.



A/C Head Base

Fig. C-5-1

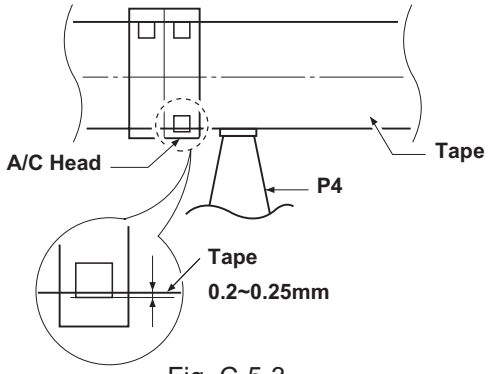
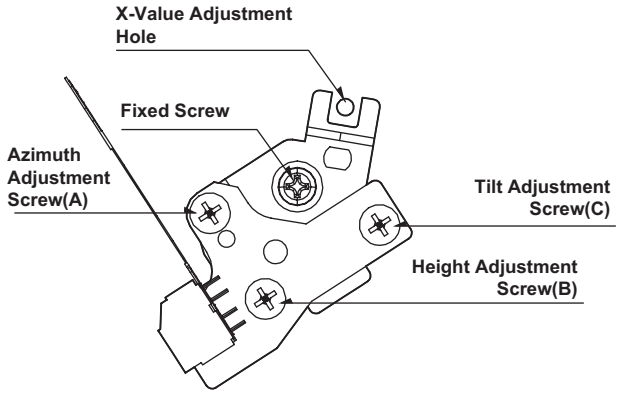


Fig. C-5-3



A/C Head Assembly

Fig. C-5-2

4.1.6.2 Tape Path Check between Pinch Roller and Take up Guide (Check in the Rev Mode)

1) Check the tape pass status between the pinch roller and the take-up guide.(Check there is crumpling of the tape pass and folding of the take-up guide.)
   (1) When holding of the take-up guide bottom occurs
   Turn the tilt adjusting screw (C) clockwise and travel it stably to ensure there is no crumbling or folding of the tape.
   (2) When holding of the take-up guide top occurs
   Turn the tilt adjusting screw (C) anti-clockwise and travel it stably to ensure there is no crumbling or folding of the tape.
2) Check there is folding of the tape at the bottom or top of the take-up guide in cutting-off the REV mode

CAUTIONS

If the RF waveform is changed after adjusting the A/C head, perform fine adjustment to ensure the RF waveform is flattened.

4.1.6.3 Fine Adjustment (Azimuth Adjustment)

Fixtures and tools used	Connection position	VCR (VCP) status	Adjustment position
• Oscilloscope • Standard test tape (only for SP) • Driver (+) Type 4mm	• Audio Output Jack	• Play the Alignment tape • 1KHz, 7KHz.	• Azimuth Adjusting Screw (A) • Height Adjusting Screw (B)

Adjustment Procedure

1) Connect the probe of Oscilloscope to the audio output jack.
2) Ensure that Audio 1KHz, 7KHz output is flattened at the maximization point by adjusting the Azimuth adjusting screw (A).

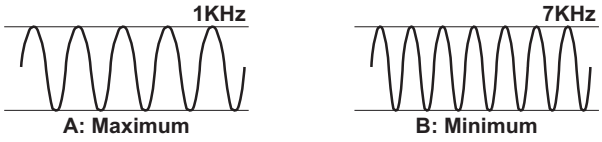
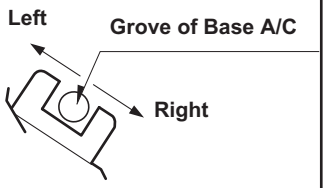


Fig. C-5-4

4.1.7 X-Value Adjustment

Purpose of adjustment : To maintain compatibility with other VCR (VCP).

Fixtures and tools used	Connection position	VCR (VCP) status	Adjustment position
• Oscilloscope • Standard test tape (only for SP) • Driver (+) Type 4mm	• CH-1: PB RF Envelope • CH-2: NTSC ; SW 30Hz PAL:SW 25Hz • Head switching output point • RF Envelope output point	• Play the Alignment tape	

Adjustment Procedure

1) After releasing the auto tracking, lightly turn the fixing screw. Turn the (+) type driver on the X-dis-tance adjusting hole to the right or left. Adjust the RF envelope level to the maximum point and then fix the fixing screws.
2) For the 31 μm head, adjust it with the SP tape recorded in the width of 31 μm since the head travels on the tape track only for SP with the width of 58 μm.

Connection Diagram

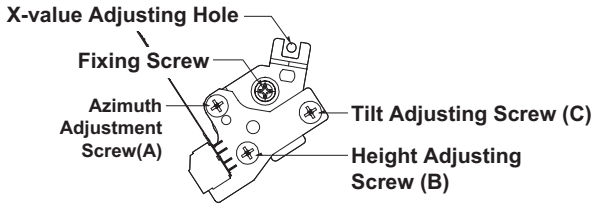
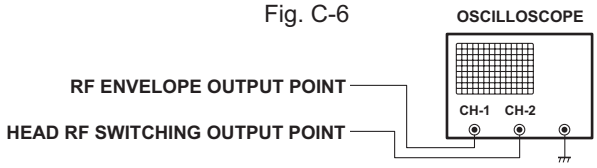


Fig. C-6



4.1.8 Adjustment after Drum Assembly (Video Heads)

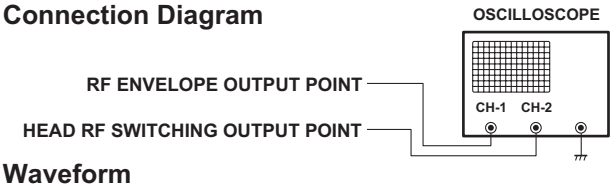
Purpose of adjustment : To adjust and stabilize the height change, X-distance change, etc depending on the guide roller after assembling the drum.

Fixtures and tools used	Connection position	VCR (VCP) status	Adjustment position
・Oscilloscope ・Alignment tape (only for SP) ・Post Height Adjusting Driver ・Driver (+) Type 5mm	・CH-1: PB RF Envelope ・CH-2: NTSC : SW 30Hz PAL:SW 25Hz ・Head switching output point ・RF Envelope output point	・Play the blank tape. ・Play the Alignment tape.	・Fine adjustment of guide roller ・Switching Point ・Tracking Preset ・X-value

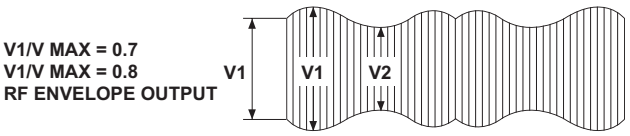
Checking/Adjustment Procedure

1) Play the blank tape and check whether the guide roller crumbles or wrinkles the tape and adjust it if necessary.
2) Check that the RF envelope output waveform is flat, and adjust the height of the guide roller while playing the alignment tape.
3) Adjust the switching point.
4) Check the RF envelope output is the maximum when the tracking control locates at the center. If not maximum, set up to ensure that RF envelope output becomes the maximum by turning the (+) type driver on the base A/C groove.

Connection Diagram



Waveform



4.1.9 Check of Traveling Device after Deck Assembly

4.1.9.1 Audio, RF Normalization Time (Locking Time) Check in Play after CUE or REV

Fixtures and tools used	Measuring standard	Connection position	VCR (VCP) status
・Oscilloscope ・Alignment tape (Colour bar) ・Stop Watch	・RF Locking Time: Within 5 seconds ・Audio Locking Time : Within 10 seconds	・CH-1: PB RF Envelope ・CH-2: Audio output ・RF Envelope output point ・Audio output jack	・Play the Alignment tape (Colour bar)

Checking Procedure

1) Check that locking time of the RF and Audio waveform is fallen within the measuring standard in conversion of the play mode from the CUE or the REV mode.
2) Readjust the paragraph 4.3.6 and 4.3.7 if it deviates from the standard.

4.1.9.2 Check of Tape Curl and Jam Status

Fixtures and tools used	Fixtures and tools used	Fixtures and tools used
・E-240 Tape ・E-160 Tape	・There must be no jam or curl at the first, middle and end position of tape.	・Travel the tape at the position of its first and end.

Checking Procedure

1) Check there is no abnormality of every traveling post status.
2) There must be no abnormal operation of the counter in occurrence of folding of the bottom tape. There must be not abnormality of audio signal in damage of the top tape.
3) If there is abnormality, readjust the adjustment paragraph 4.3.5 and 4.3.6.

4.2 PROTECTION, MAINTENANCE AND CHECK OF VIDEO FUNCTION (VCR)

4.2.1 Checking Points prior to Repair

Following abnormal phenomena may be repaired by removal of foreign materials and oil supply. Check oiling is required at the checking set or cleaning status is complete.

Determine that necessity of checking and repair the set exists after checking the using period of the set together with the user. In this case, followings must be checked:

Phenomena	Checking Points and Cause	Replacement
Color beat	Pollution of Full-Erase Head	o
S/N, Color Faded	Pollution of Video Head	o
Horizontal, Vertical Jitte	Pollution of Video Head or Tape Transport System	o
Poor Sound, Low Sound	Pollution of Audio/Control Head	o
No tape wound or tape wound loosely. FF or REW impossible, or slow turning	Pollution of Pinch Roller or Belt Capstan Belt	o
Tape loosely wound in REV or Unloading	Deterioration of Clutch Assembly D37 Torque	o
	Pollution of Drum and Traveling Device	Fig. C-9-3

CAUTIONS

If operation of the position with (O) mark is abnormal even after removing cause, replace it with substitute product since it shows damage or wearing.

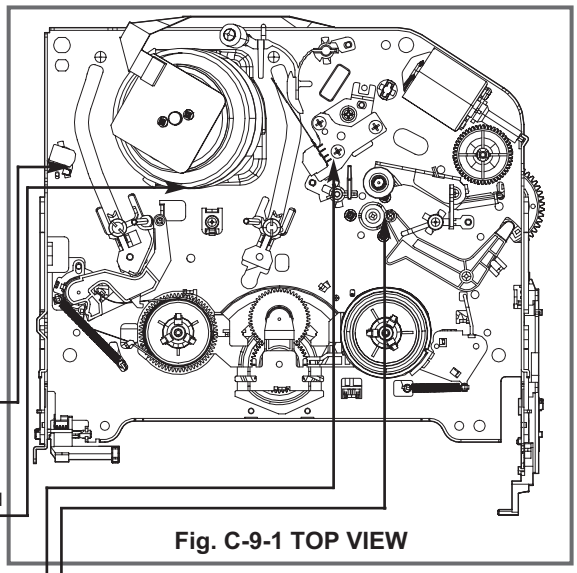


Fig. C-9-1 TOP VIEW

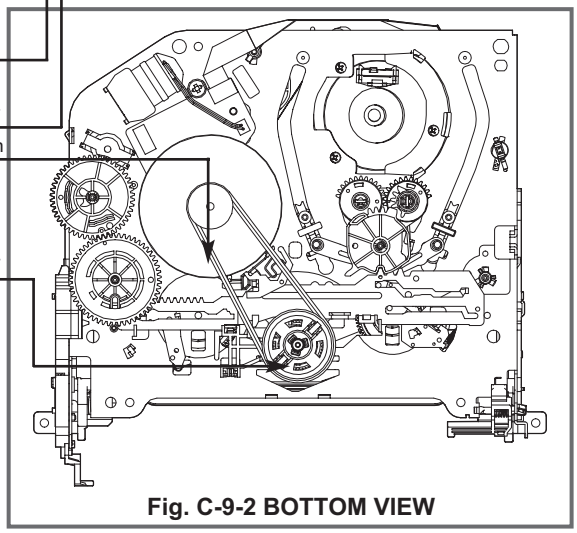


Fig. C-9-2 BOTTOM VIEW

*** No. (1) ~ (12) shows sequence that the tape moves from the supply reel to the take-up reel.)**

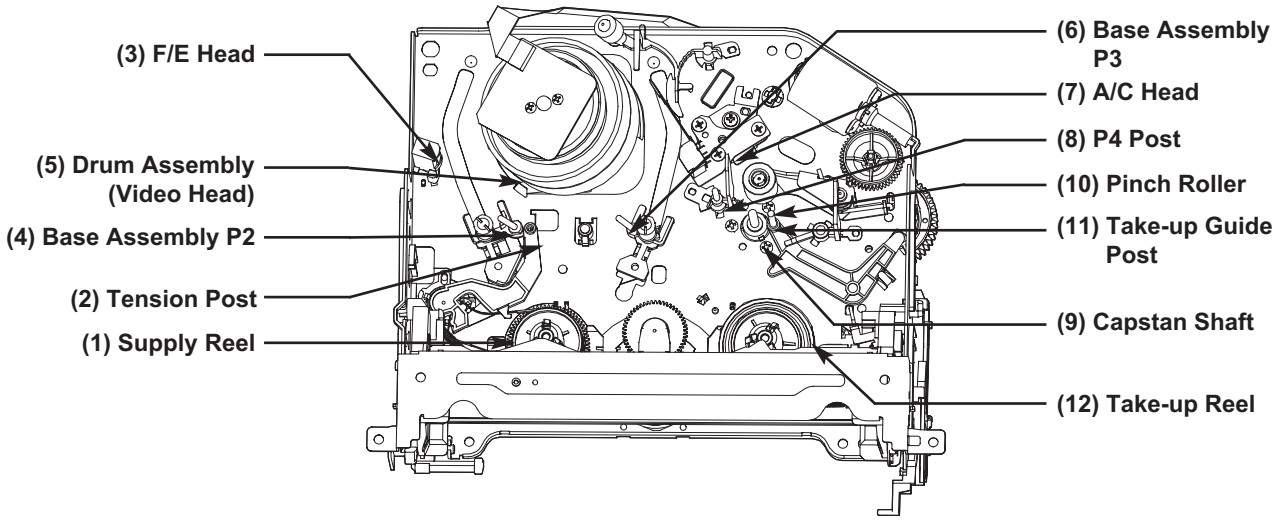


Fig. C-9-3 Tape Transport System

4.2.2 Essential Check and Repair

Recording density of the video is far higher than the audio.
Therefore video parts are very precise so as to allow only error of 1/1000mm or so in order to maintain compatibility with other videos.
If one of these parts is polluted or old, same phenomena will appear as they are damaged.
To maintain clear screen, regular check, replacement of old and damaged parts and oil supply, etc are essential.

4.2.3 Regular Check and Repair

Check and repair schedule is not constant since they vary depending on method that the consumer uses video and environment where the video is installed at.
However, for the video used by common household, good screen will be maintained if regular check and repair per 1,000 hour is performed. The following chart shows relationship between using time and checking time:

Time Requiring Checking / Average hours used per day	About 1 year	About 18 months	About 3 years
One hour	■	■	■
Two hours	■	■	
Three hours	■		

4.2.4 Tools for Check and Repair

(1) Grease: Floil G-3114 (KANTO) or equivalent grease (Green)
(2) Grease: Kanto G-754, PL-433 (Yellow)
(3) Alcohol (Isopropyl Alcohol)
(4) Cleaning Patch (cloth)

4.2.5 Maintenance Process

4.2.5.1 Removal of Foreign Material

(1) Removal of foreign material from video head (Fig. C-9-4)
Firstly try to use a cleaning tape.
Use a cleaning patch if foreign materials are not removed with the cleaning tape due to severe dirty of the head.
Soak the cleaning patch in alcohol and put it to the head tip.
Smoothly turn the drum (turning cylinder) to the right or left (In this case, the cleaning patch must not be moved vertically).
After completely drying the head, test the traveling status of the tape.
If alcohol (Isopropyl Alcohol) remains at the video head, the tape may be damaged when this solution touches with the head surface.

Never use a cloth bar (commercial sale)

(2) Wipe the tape transport system and the drive system with the cleaning patch soaked in alcohol (Isopropyl Alcohol) when removing foreign materials from them.
1) The part touched with the traveling tape is called as tape transport system. The drive system consists of parts to travel the tape.
2) Care must be exercised so that unreasonable force to change the pattern will be applied to the tape transport system during removal of foreign materials.

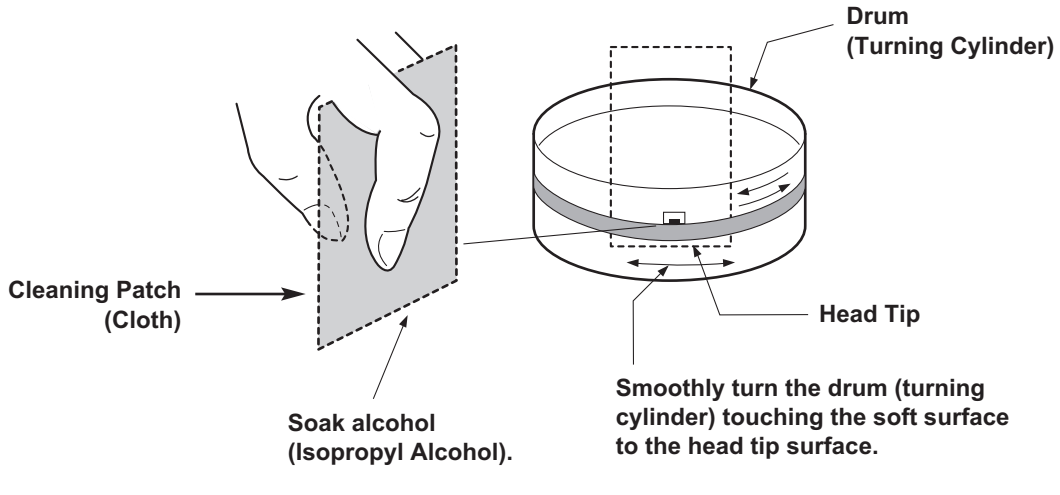


Fig. C-9-4

4.2.5.2 Grease Applications

(1) Grease Application Method

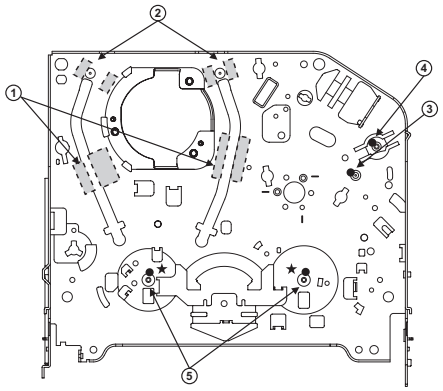
Apply grease by using a cloth swab or brush. Care must be exercised so that excess quantity should not be used. If the excessive quantity is applied, wipe it with the gauze soaked in alcohol (Isopropyl Alcohol).

(2) Regular Grease Application

Apply grease to the designated application position every 500 hour.

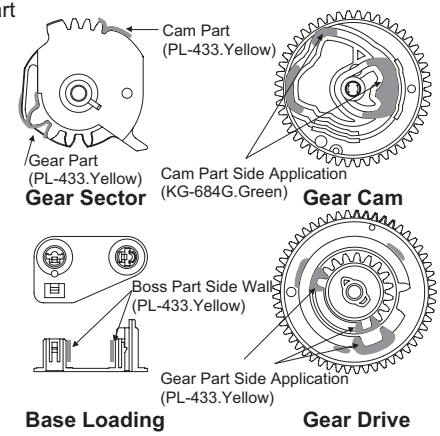
NOTE: POSITION OF GREASE APPLICATION

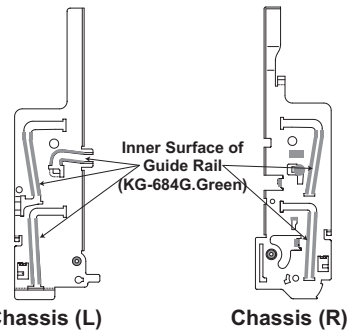
(1) Inner Side Surface and Top Surface of Loading Path
(2) Stable Adhesion Part of Base P2, P3
(3) Arm Pinch Shaft
(4) Gear Wheel Shaft
(5) Reel S. T. Shaft
(1) (2) (3) (4): KG-684G (Green)
(5): PL-433 (Yellow)



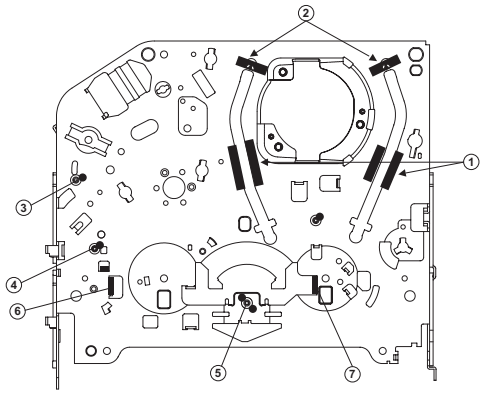
Chassis (TOP)

Gear Part

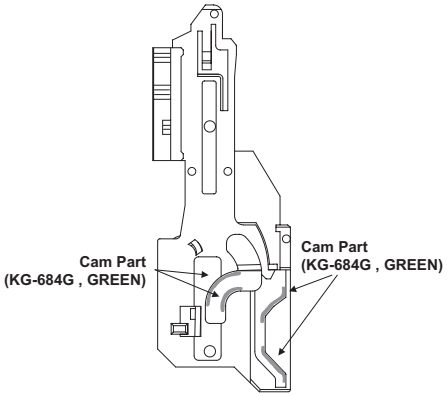




(1) Inner Side Surface and Top Surface of Loading Path
(2) Stable Adhesion Part of Base P2, P3 Coil
(3) Gear Cam Shaft
(4) Gear Drive Shaft
(5) Clutch Shaft Groove
(6) Guide Part on the Plate Slider Side Wall (Left)
(7) Guide Part on the Plate Slider Side Wall (Right)
(1) (2) (3) (4) (5) (6) (7): KG-684G (Green)



Chassis (Bottom)



Gear Rack F/L

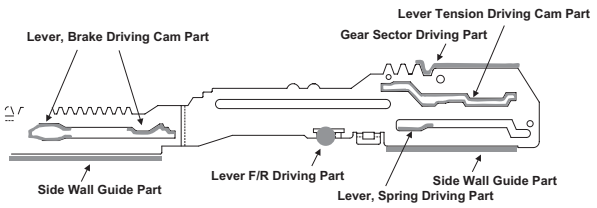
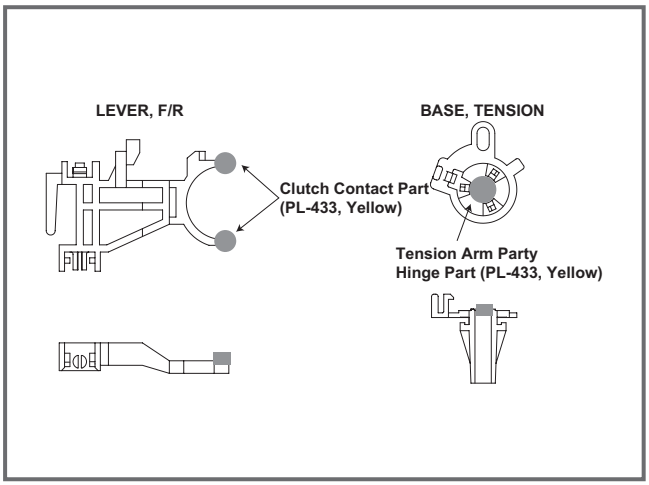
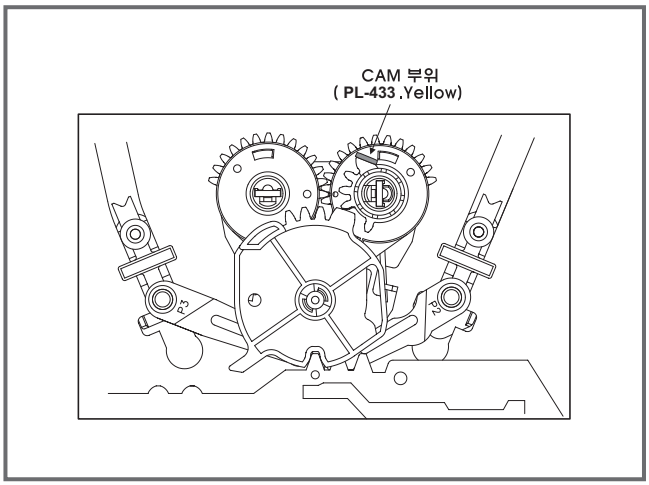

Lever Tension Driving Cam Part
Lever, Brake Driving Cam Part
Gear Sector Driving Part
Lever F/R Driving Part
Side Wall Guide Part
Side Wall Guide Part
Lever, Spring Driving Part

Plate Slider

Lever, F/R, Base, Tension



GEAR AY, P2 & P3



4.3 ELECTRICAL ADJUSTMENT PROCEDURES (VCR)

4.3.1 Servo Adjustment

1) PG Adjustment

▪ Test Equipment

a) OSCILLOSCOPE	b) Alignment tape (SP, stairstep)

▪ Adjustment And Specification

MODE	MEASUREMENT POINT	ADJUSTMENT POINT	SPECIFICATION
PLAY	V.Out H/SW(TP)	R/C TRK JIG KEY	6.5 ± 0.5H

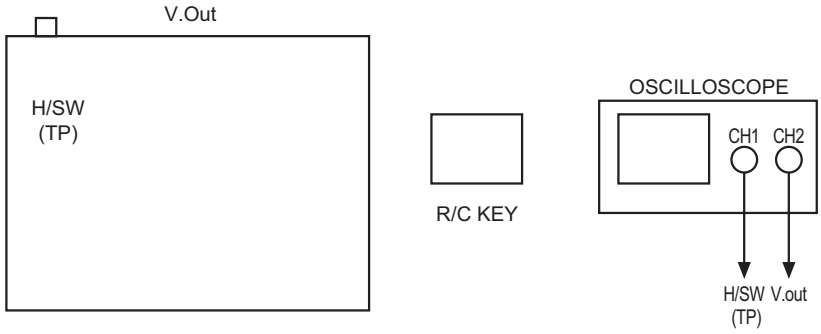
▪ Adjustment Procedure

a) Insert the Alignment Tape and play.
   Note - Adjust the distance of X, pressing the Tracking(+) or Tracking(-) when the "ATR" is blink after the Alignment Tape is inserted.
b) Connect the CH1 of the oscilloscope to the H/SW(TP) and CH2 to the Video Out for the VCR.
c) Trigger the mixed Combo Video Signal of CH2 to the CH1 H/SW(TP) and then check the distance (time difference), which is from the selected A(B) Head point of the H/SW(TP) signal to the starting point of the vertical synchronized signal, to 6.5H ± 0.5H (412μs, 1H=63μs).

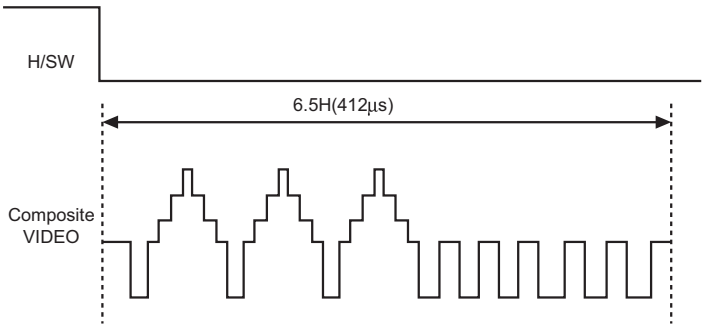
▪ PG Adjustment Method

a-1) Playback the Alignment tape
b-2) Press the "OK(ENTER)" key on the Remote controller and the "REC" key on the Front Panel the same time, then it goes in to Tracking initial mode.
c-3) Repeat the above step(No.b-2), then it finishes the PG adjusting automatically.
d-4) Stop the playback, then it goes out to PG adjusting mode after mony the PG data.

▪ CONNECTION



▪ WAVEFORM

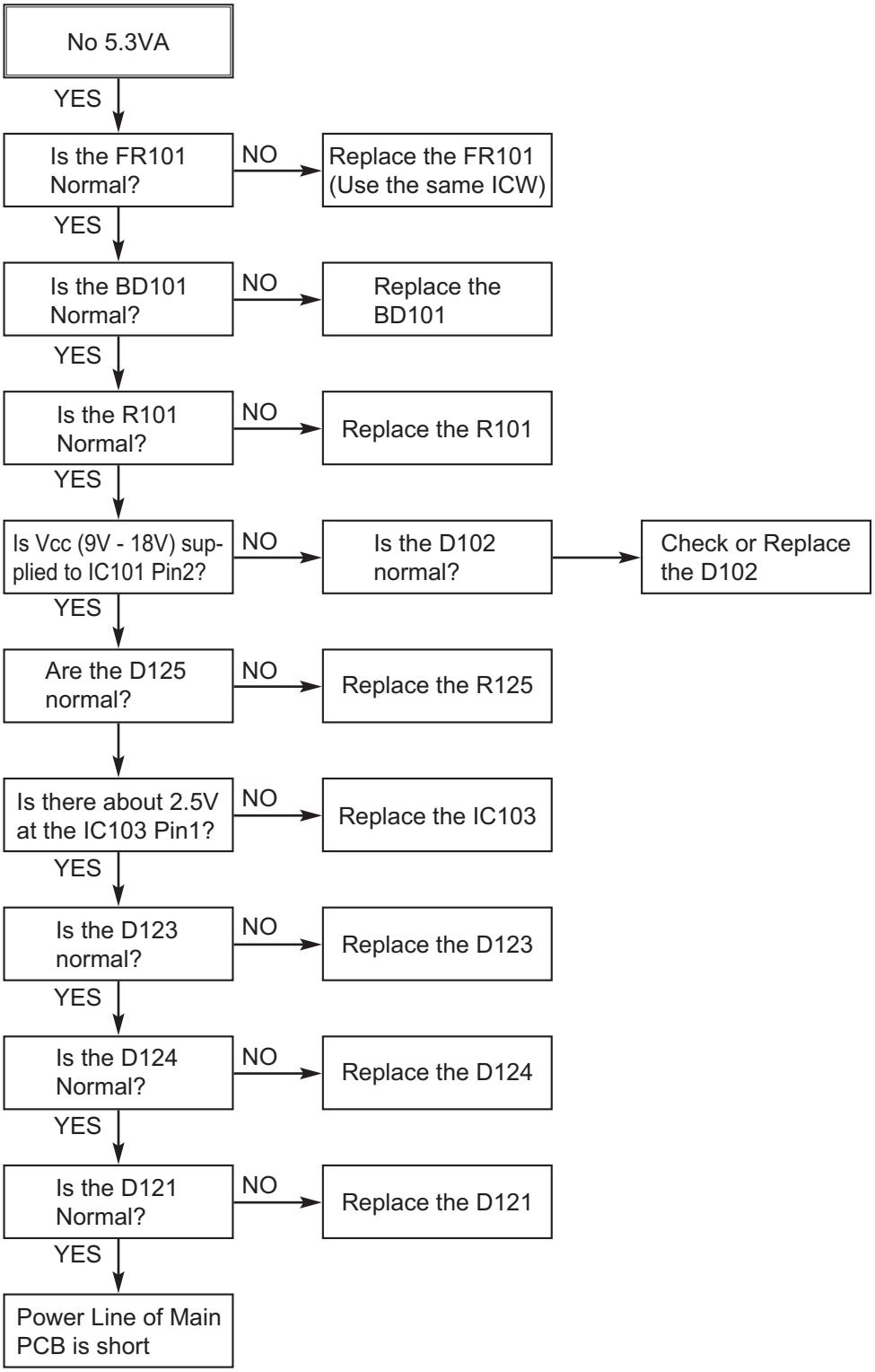


SECTION 5
TROUBLESHOOTING

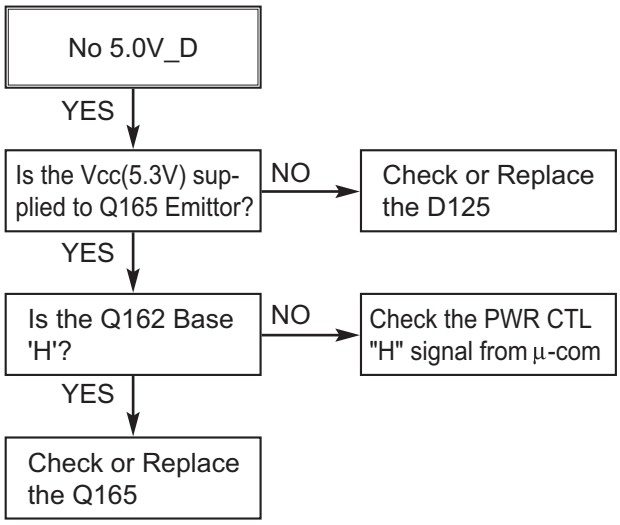
5.1 ELECTRICAL TROUBLESHOOTING GUIDE (VCR PART)

5.1.1 Power(SMPS) CIRCUIT

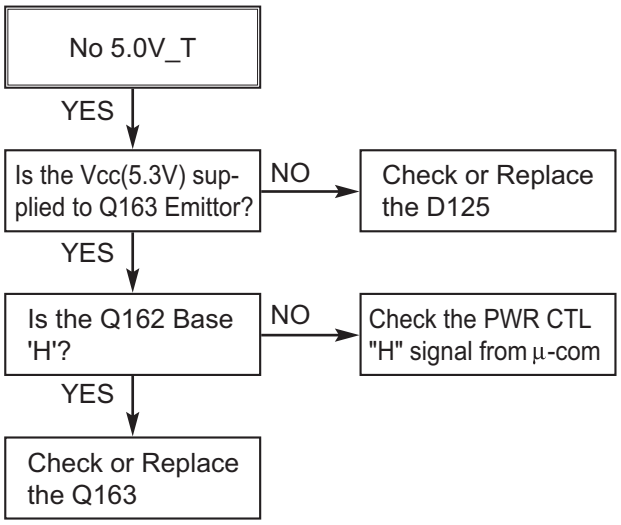
(1) No 5.3VA



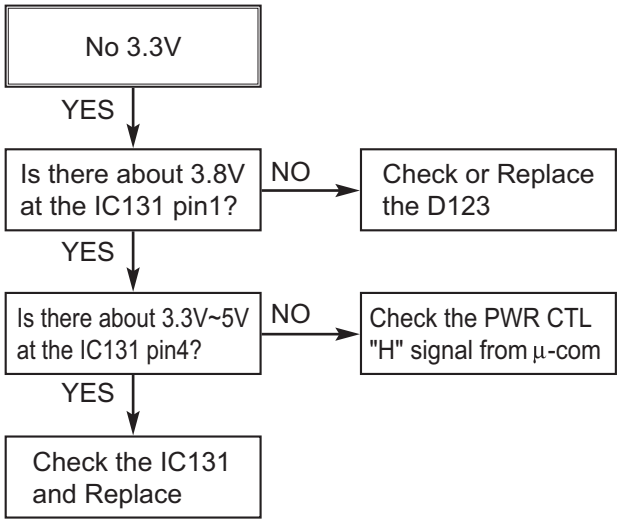
(2) No 5.0V_D



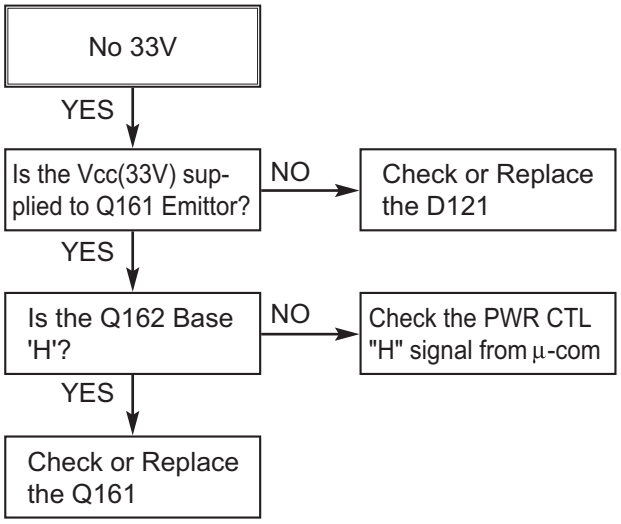
(3) No 5.0V_T



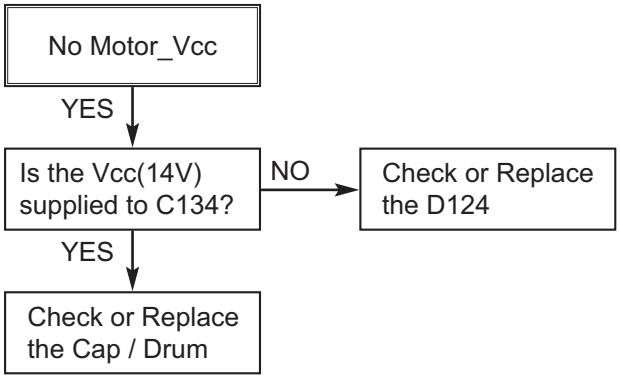
(4) No 3.3V



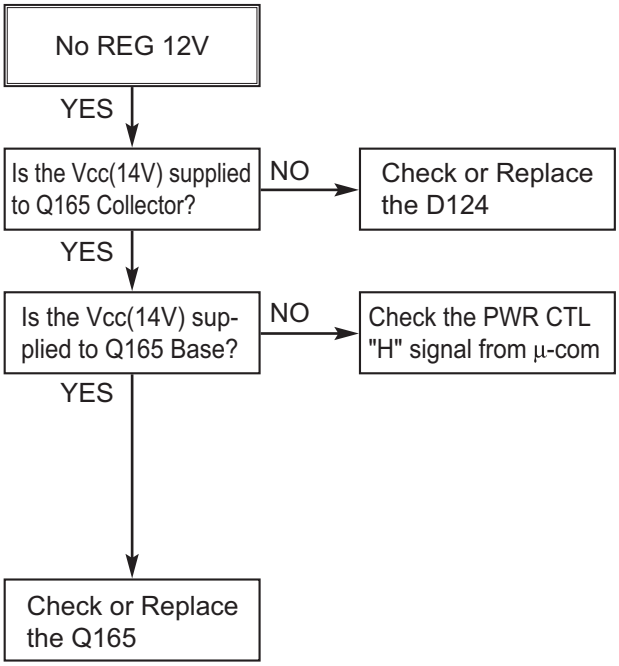
(5) No 33V



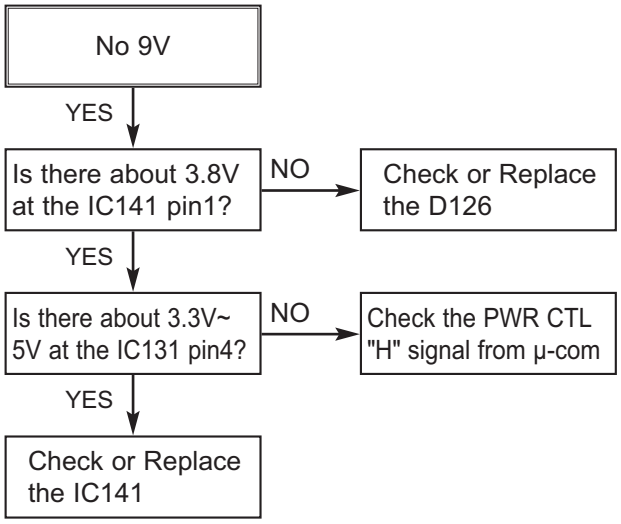
(6) No Motor_Vcc (To Cap, Drum Motor)



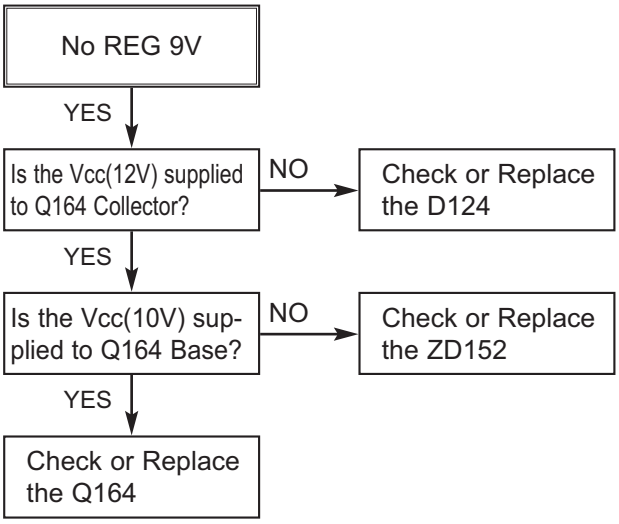
(7) No REG 12V



(8) No 9V

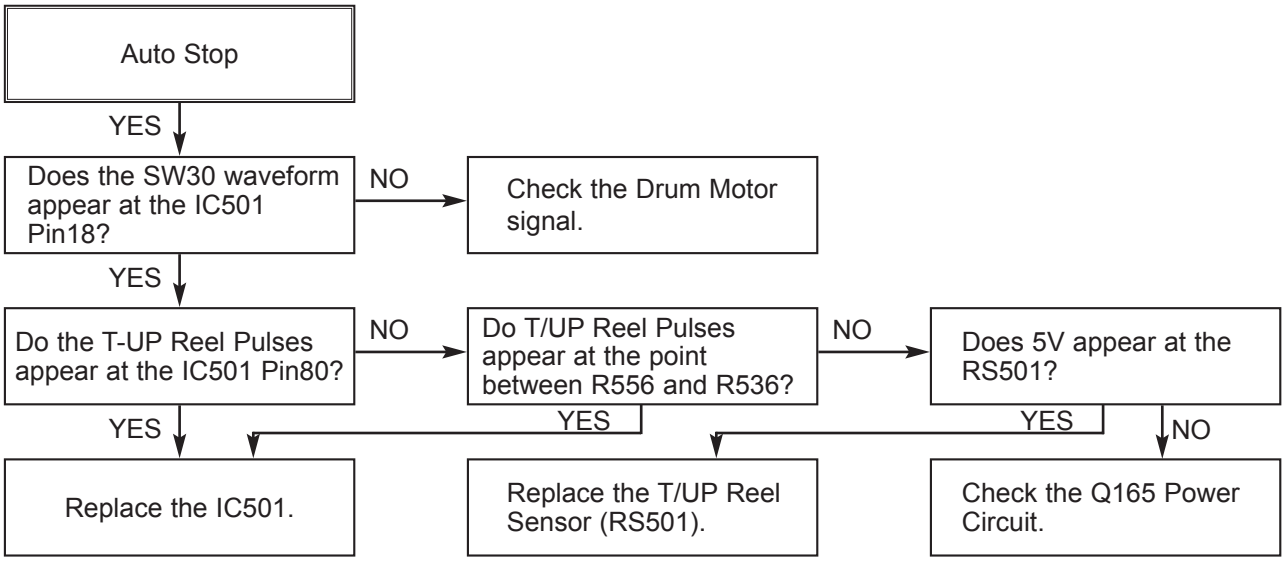


(9) No REG 9V

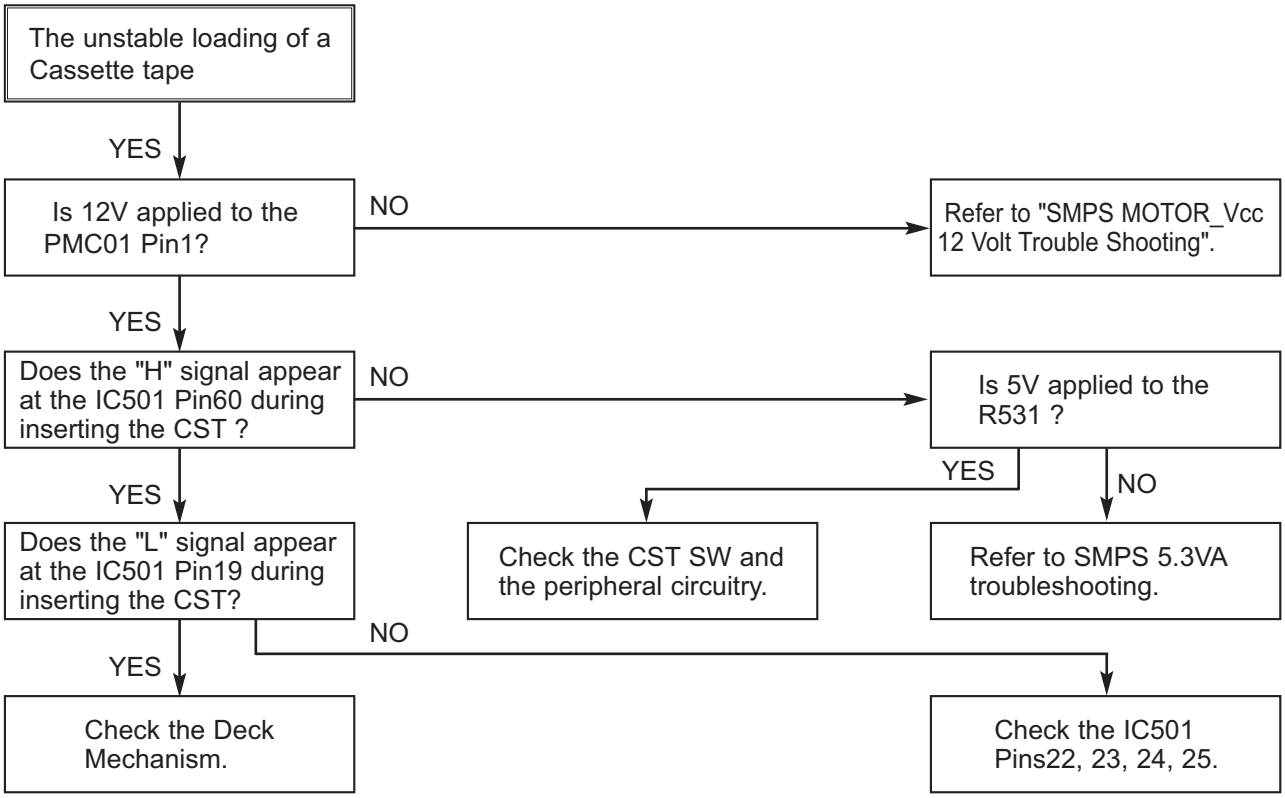


5.1.2 SYSTEM/KEY CIRCUIT

(1) AUTO STOP



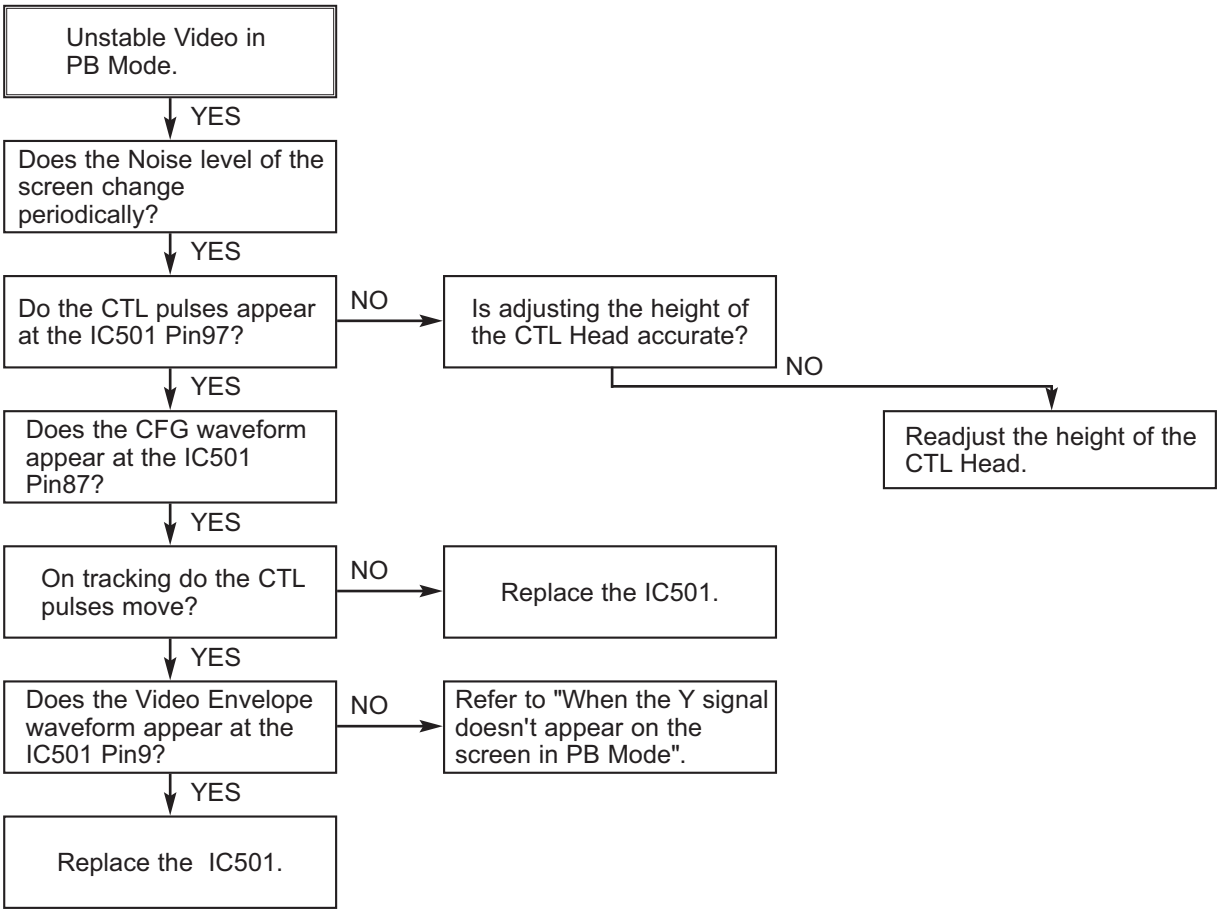
(2) The unstable loading of a Cassette tape


The unstable loading of a Cassette tape
YES
Is 12V applied to the PMC01 Pin1?
NO
Refer to "SMPS MOTOR_Vcc 12 Volt Trouble Shooting".
YES
Does the "H" signal appear at the IC501 Pin60 during inserting the CST ?
NO
Is 5V applied to the R531 ?
YES
YES
NO
Does the "L" signal appear at the IC501 Pin19 during inserting the CST?
Check the CST SW and the peripheral circuitry.
Refer to SMPS 5.3VA troubleshooting.
NO
YES
Check the Deck Mechanism.
Check the IC501 Pins22, 23, 24, 25.

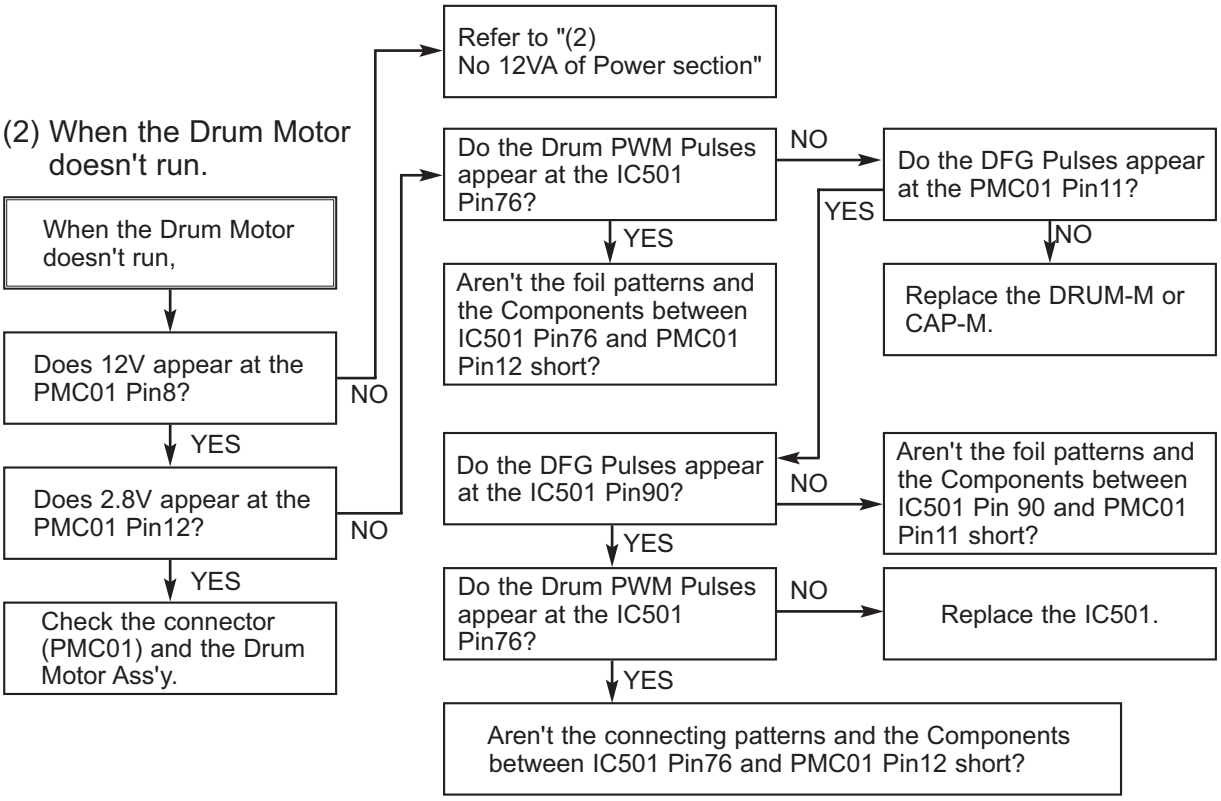
Caution : Auto stop can occur because Grease or Oil is dried up

5.1.3 SERVO CIRCUIT

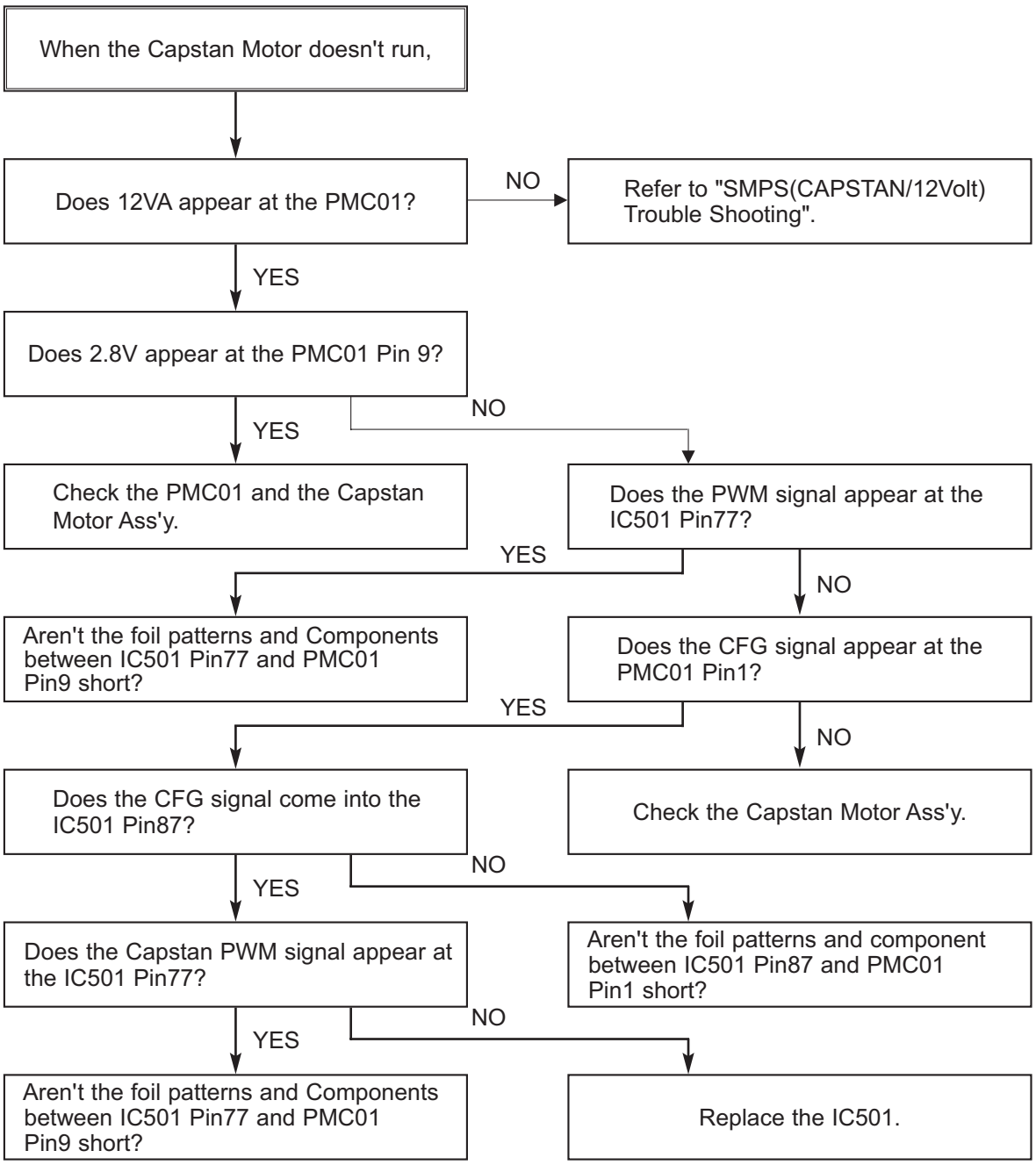
(1) Unstable Video in PB MODE


Unstable Video in PB Mode.
YES
Does the Noise level of the screen change periodically?
YES
Do the CTL pulses appear at the IC501 Pin97?
NO
Is adjusting the height of the CTL Head accurate?
NO
Readjust the height of the CTL Head.
YES
Does the CFG waveform appear at the IC501 Pin87?
YES
On tracking do the CTL pulses move?
NO
Replace the IC501.
YES
Does the Video Envelope waveform appear at the IC501 Pin9?
NO
Refer to "When the Y signal doesn't appear on the screen in PB Mode".
YES
Replace the IC501.

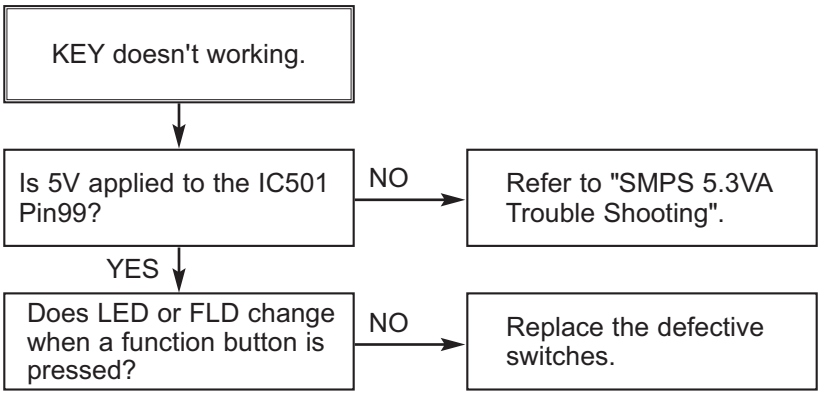
(2) When the Drum Motor doesn't run.


When the Drum Motor doesn't run,
Does 12V appear at the PMC01 Pin8?
NO
Refer to "(2) No 12VA of Power section"
YES
Does 2.8V appear at the PMC01 Pin12?
NO
Do the Drum PWM Pulses appear at the IC501 Pin76?
NO
Do the DFG Pulses appear at the PMC01 Pin11?
YES
YES
NO
Aren't the foil patterns and the Components between IC501 Pin76 and PMC01 Pin12 short?
Replace the DRUM-M or CAP-M.
YES
Check the connector (PMC01) and the Drum Motor Ass'y.
Do the DFG Pulses appear at the IC501 Pin90?
NO
Aren't the foil patterns and the Components between IC501 Pin 90 and PMC01 Pin11 short?
YES
Do the Drum PWM Pulses appear at the IC501 Pin76?
NO
Replace the IC501.
YES
Aren't the connecting patterns and the Components between IC501 Pin76 and PMC01 Pin12 short?

(3) When the Capstan Motor doesn't run,

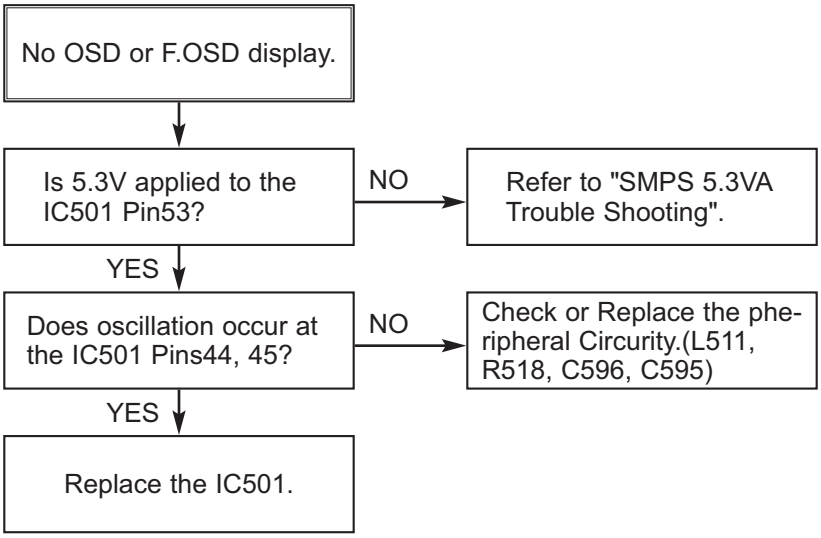

When the Capstan Motor doesn't run,
Does 12VA appear at the PMC01?
NO
Refer to "SMPS(CAPSTAN/12Volt) Trouble Shooting".
YES
Does 2.8V appear at the PMC01 Pin 9?
NO
YES
Check the PMC01 and the Capstan Motor Ass'y.
Does the PWM signal appear at the IC501 Pin77?
YES
NO
Aren't the foil patterns and Components between IC501 Pin77 and PMC01 Pin9 short?
Does the CFG signal appear at the PMC01 Pin1?
YES
NO
Does the CFG signal come into the IC501 Pin87?
Check the Capstan Motor Ass'y.
NO
YES
Does the Capstan PWM signal appear at the IC501 Pin77?
Aren't the foil patterns and component between IC501 Pin87 and PMC01 Pin1 short?
NO
YES
Aren't the foil patterns and Components between IC501 Pin77 and PMC01 Pin9 short?
Replace the IC501.

(4) KEY doesn't working

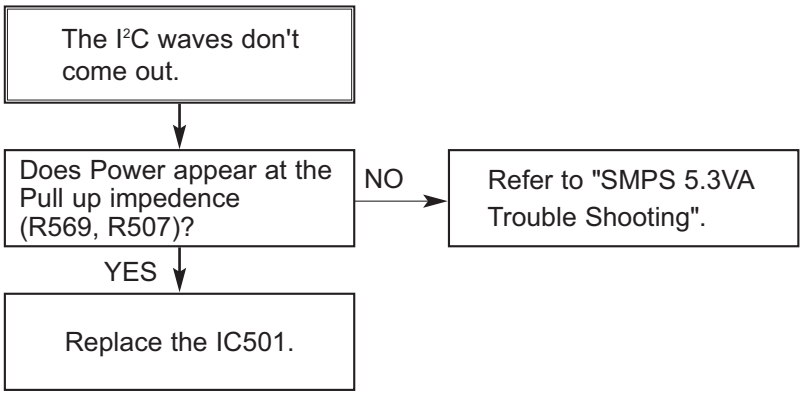

KEY doesn't working.
Is 5V applied to the IC501 Pin99?
NO
Refer to "SMPS 5.3VA Trouble Shooting".
YES
Does LED or FLD change when a function button is pressed?
NO
Replace the defective switches.

5.1.4 OSD CIRCUIT

(1) No OSD display.

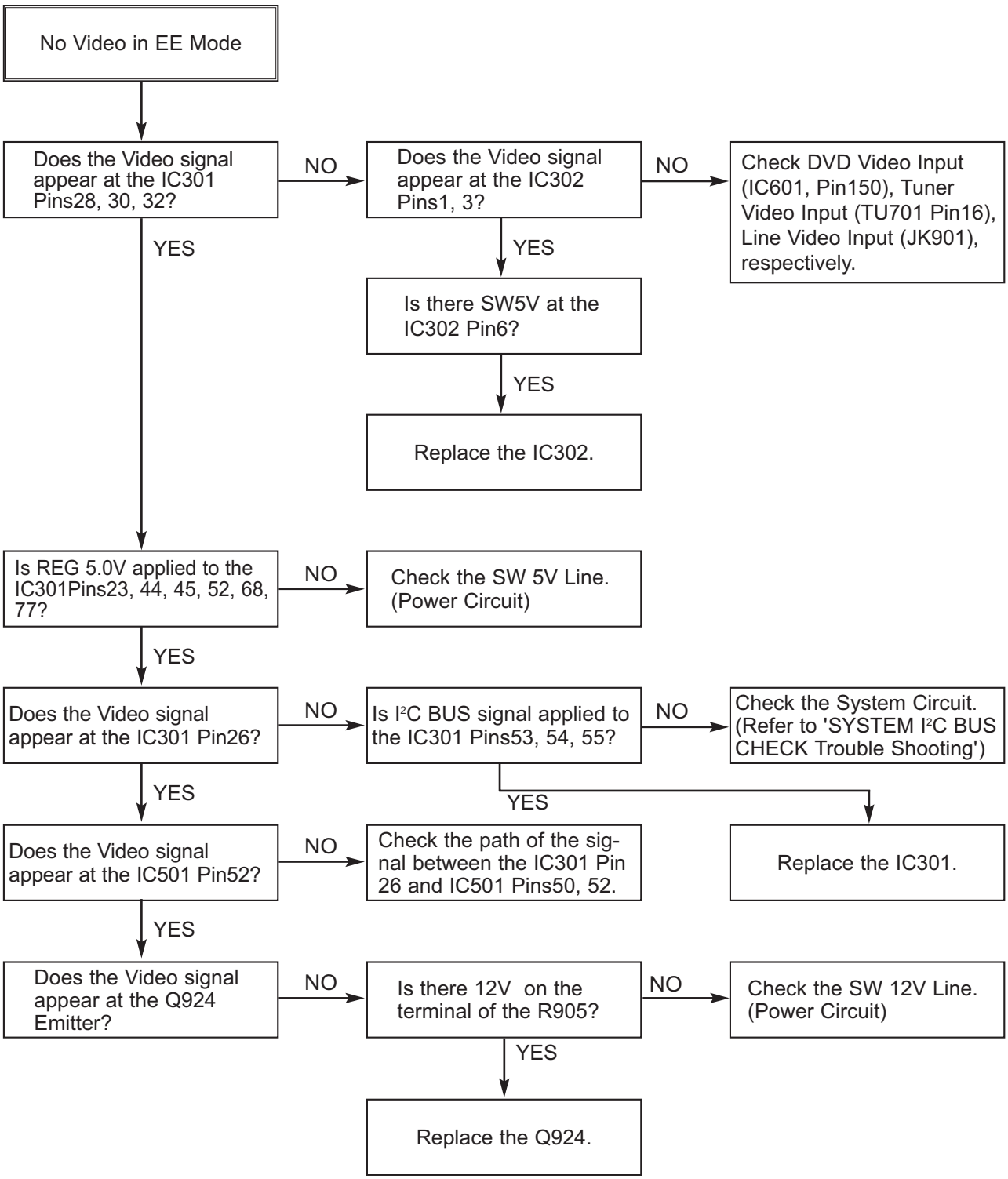

No OSD or F.OSD display.
Is 5.3V applied to the IC501 Pin53?
NO
Refer to "SMPS 5.3VA Trouble Shooting".
YES
Does oscillation occur at the IC501 Pins44, 45?
NO
Check or Replace the pheripheral Circurity.(L511, R518, C596, C595)
YES
Replace the IC501.

(2) I²C BUS CHECK

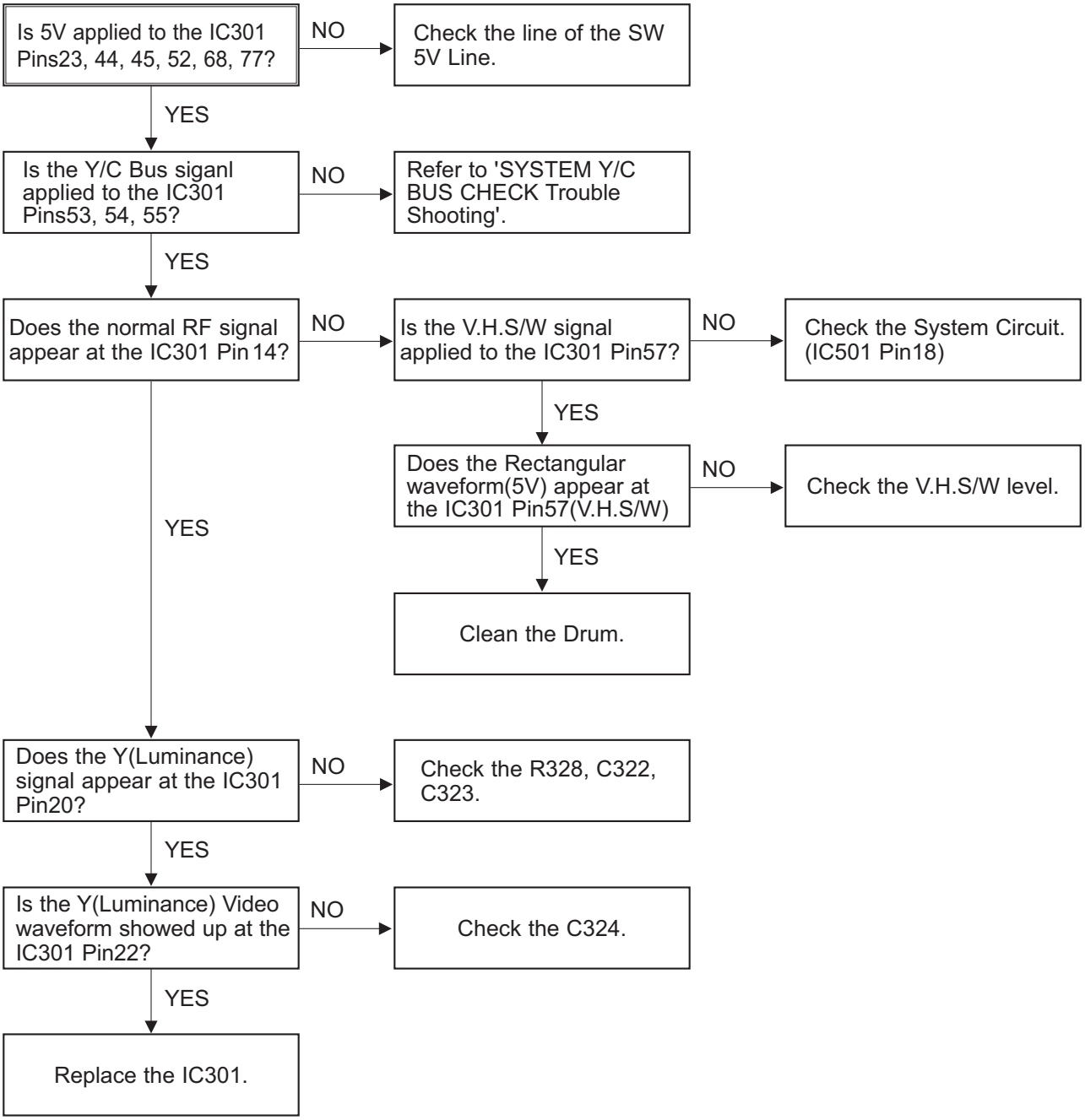

The I²C waves don't come out.
Does Power appear at the Pull up impedence (R569, R507)?
NO
Refer to "SMPS 5.3VA Trouble Shooting".
YES
Replace the IC501.

5.1.5 Y/C CIRCUIT

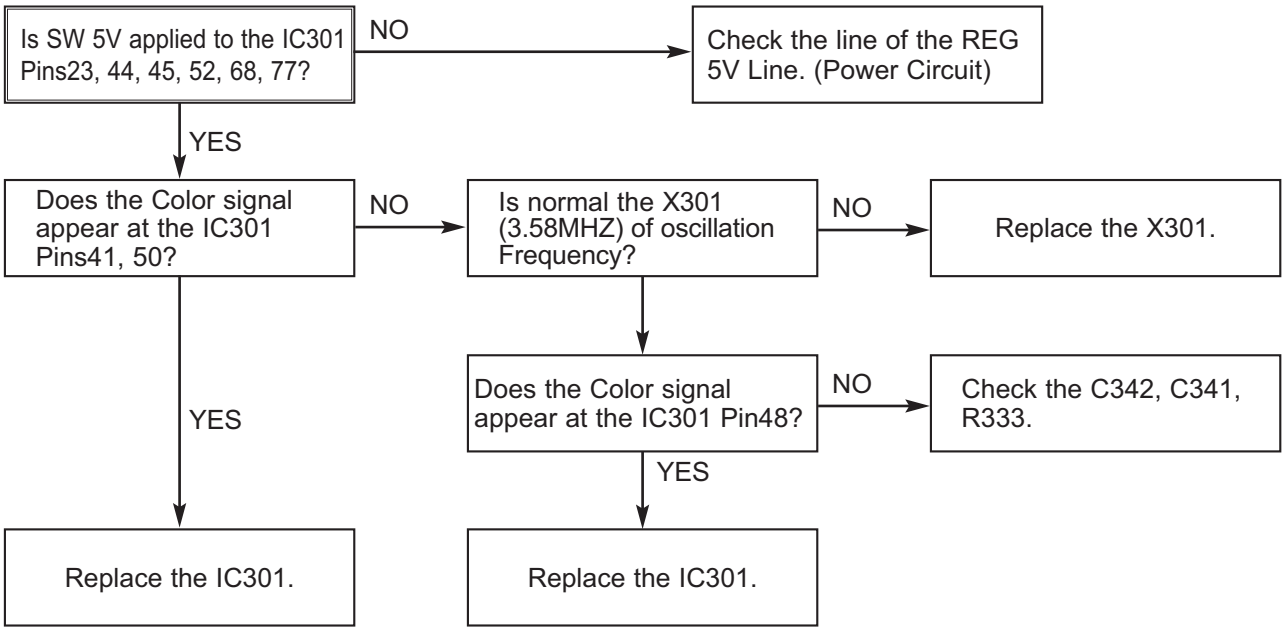
(1) No Video in EE Mode,


No Video in EE Mode
Does the Video signal appear at the IC301 Pins28, 30, 32?
NO
Does the Video signal appear at the IC302 Pins1, 3?
NO
Check DVD Video Input (IC601, Pin150), Tuner Video Input (TU701 Pin16), Line Video Input (JK901), respectively.
YES
YES
Is there SW5V at the IC302 Pin6?
YES
Replace the IC302.
Is REG 5.0V applied to the IC301Pins23, 44, 45, 52, 68, 77?
NO
Check the SW 5V Line. (Power Circuit)
YES
Does the Video signal appear at the IC301 Pin26?
NO
Is I²C BUS signal applied to the IC301 Pins53, 54, 55?
NO
Check the System Circuit. (Refer to 'SYSTEM I²C BUS CHECK Trouble Shooting')
YES
YES
Does the Video signal appear at the IC501 Pin52?
NO
Check the path of the signal between the IC301 Pin 26 and IC501 Pins50, 52.
Replace the IC301.
YES
Does the Video signal appear at the Q924 Emitter?
NO
Is there 12V on the terminal of the R905?
NO
Check the SW 12V Line. (Power Circuit)
YES
Replace the Q924.

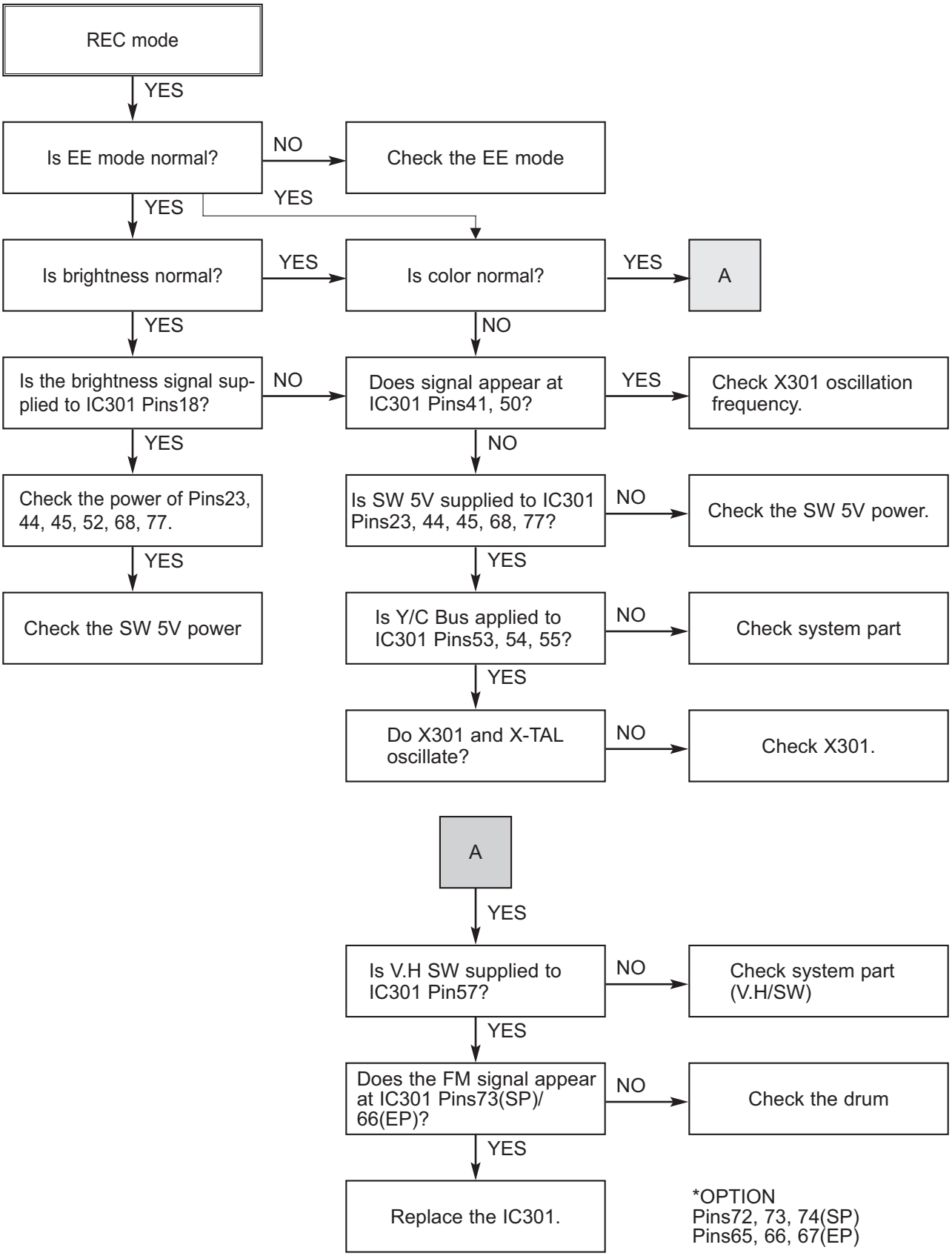
(2) When the Y(Luminance) signal doesn't appear on the screen in PB Mode,


Is 5V applied to the IC301 Pins23, 44, 45, 52, 68, 77?
NO
Check the line of the SW 5V Line.
YES
Is the Y/C Bus siganl applied to the IC301 Pins53, 54, 55?
NO
Refer to 'SYSTEM Y/C BUS CHECK Trouble Shooting'.
YES
Does the normal RF signal appear at the IC301 Pin 14?
NO
Is the V.H.S/W signal applied to the IC301 Pin57?
NO
Check the System Circuit. (IC501 Pin18)
YES
Does the Rectangular waveform(5V) appear at the IC301 Pin57(V.H.S/W)
NO
Check the V.H.S/W level.
YES
YES
Clean the Drum.
Does the Y(Luminance) signal appear at the IC301 Pin20?
NO
Check the R328, C322, C323.
YES
Is the Y(Luminance) Video waveform showed up at the IC301 Pin22?
NO
Check the C324.
YES
Replace the IC301.

(3) When the C(Color) signal doesn't appear on the screen in PB Mode,

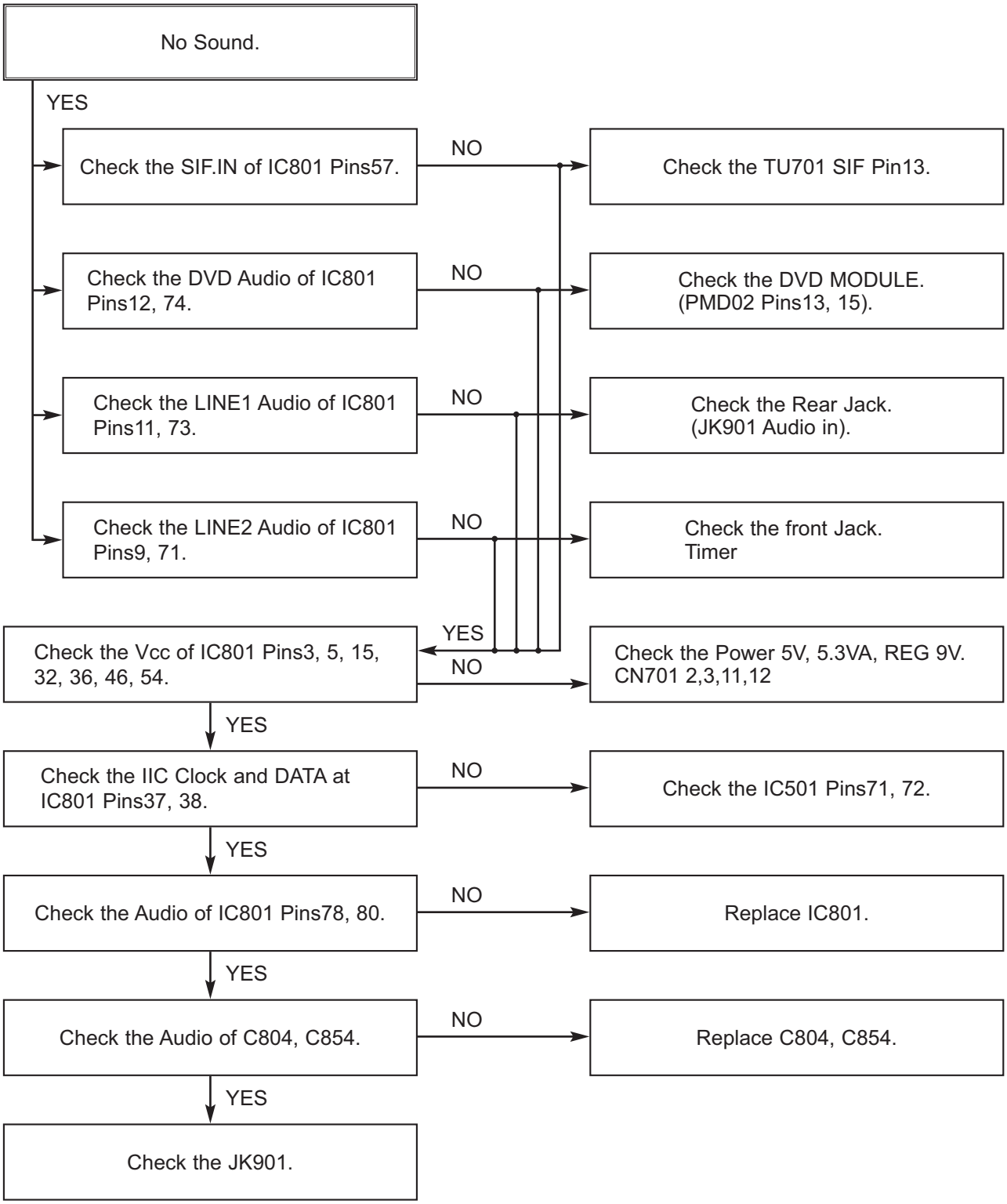

Is SW 5V applied to the IC301 Pins23, 44, 45, 52, 68, 77?
NO
Check the line of the REG 5V Line. (Power Circuit)
YES
Does the Color signal appear at the IC301 Pins41, 50?
NO
Is normal the X301 (3.58MHZ) of oscillation Frequency?
NO
Replace the X301.
YES
Does the Color signal appear at the IC301 Pin48?
NO
Check the C342, C341, R333.
YES
Replace the IC301.
Replace the IC301.

(4) When the Video signal doesn't appear on the screen in REC Mode,

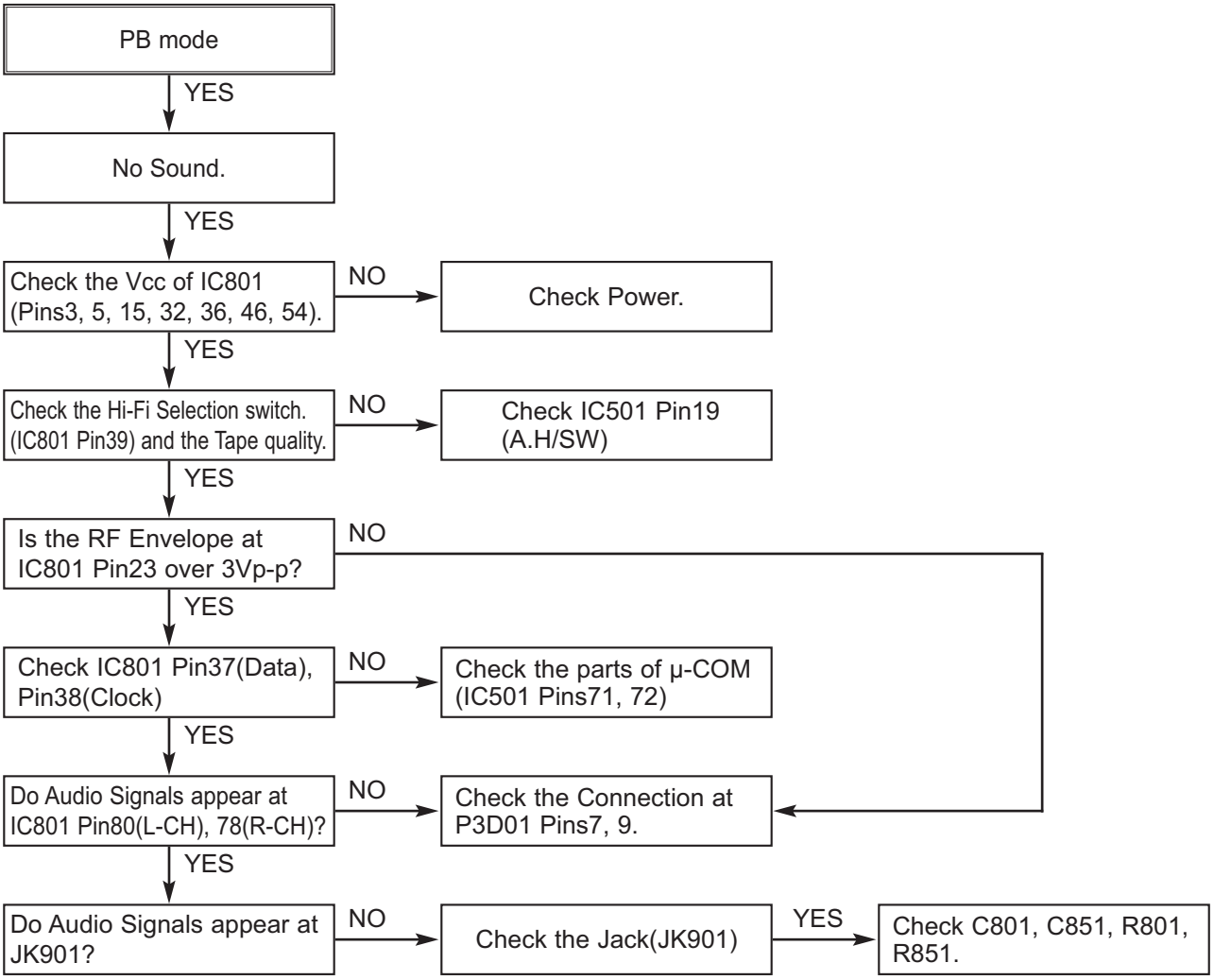


5.1.6 Hi-Fi CIRCUIT

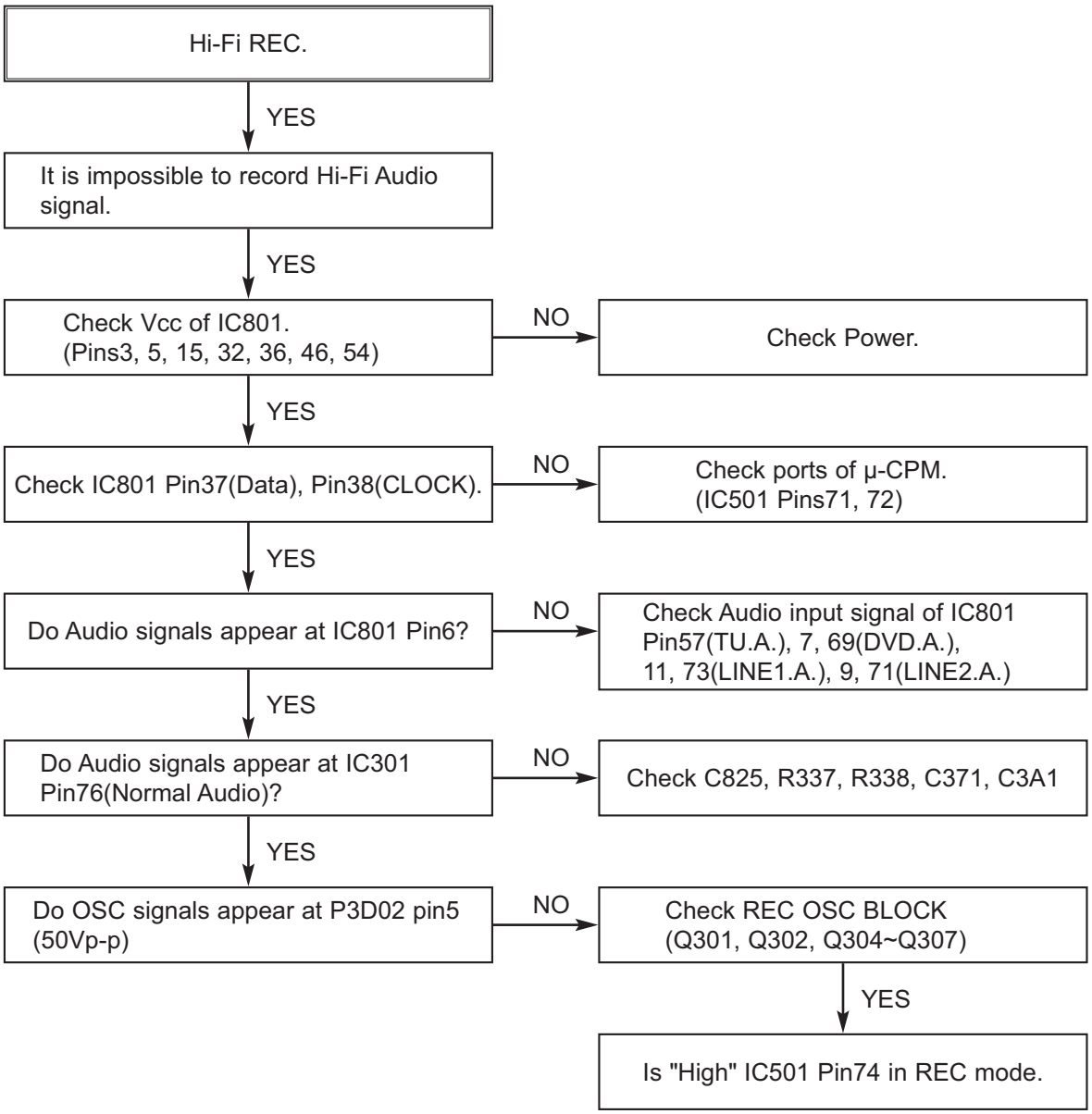
(1) No Sound(EE Mode)


No Sound.
YES
Check the SIF.IN of IC801 Pins57.
NO
Check the TU701 SIF Pin13.
Check the DVD Audio of IC801 Pins12, 74.
NO
Check the DVD MODULE. (PMD02 Pins13, 15).
Check the LINE1 Audio of IC801 Pins11, 73.
NO
Check the Rear Jack. (JK901 Audio in).
Check the LINE2 Audio of IC801 Pins9, 71.
NO
Check the front Jack. Timer
Check the Vcc of IC801 Pins3, 5, 15, 32, 36, 46, 54.
YES
NO
Check the Power 5V, 5.3VA, REG 9V. CN701 2,3,11,12
YES
Check the IIC Clock and DATA at IC801 Pins37, 38.
NO
Check the IC501 Pins71, 72.
YES
Check the Audio of IC801 Pins78, 80.
NO
Replace IC801.
YES
Check the Audio of C804, C854.
NO
Replace C804, C854.
YES
Check the JK901.

(2) Hi-Fi Playback

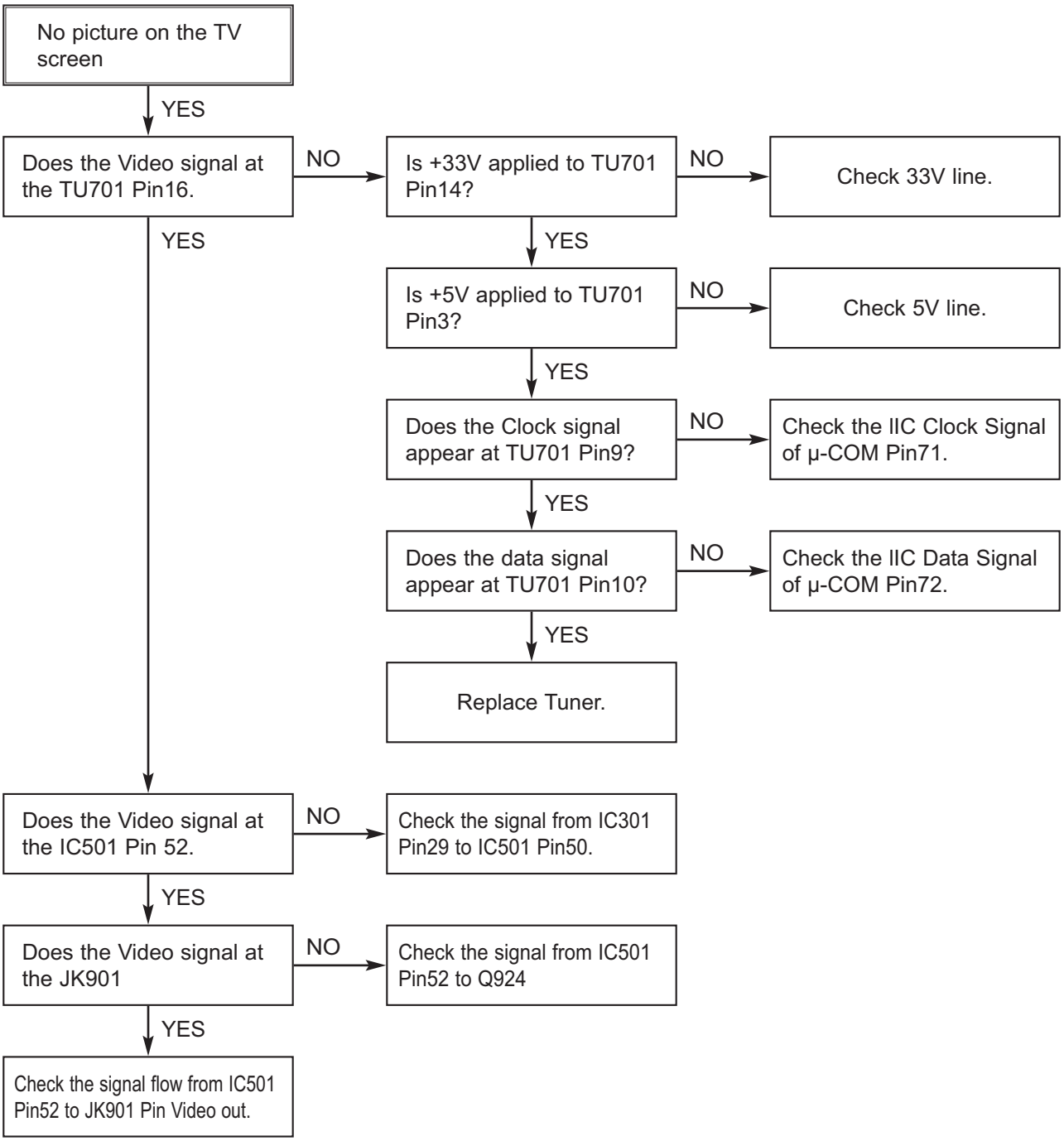


(3) Hi-Fi REC

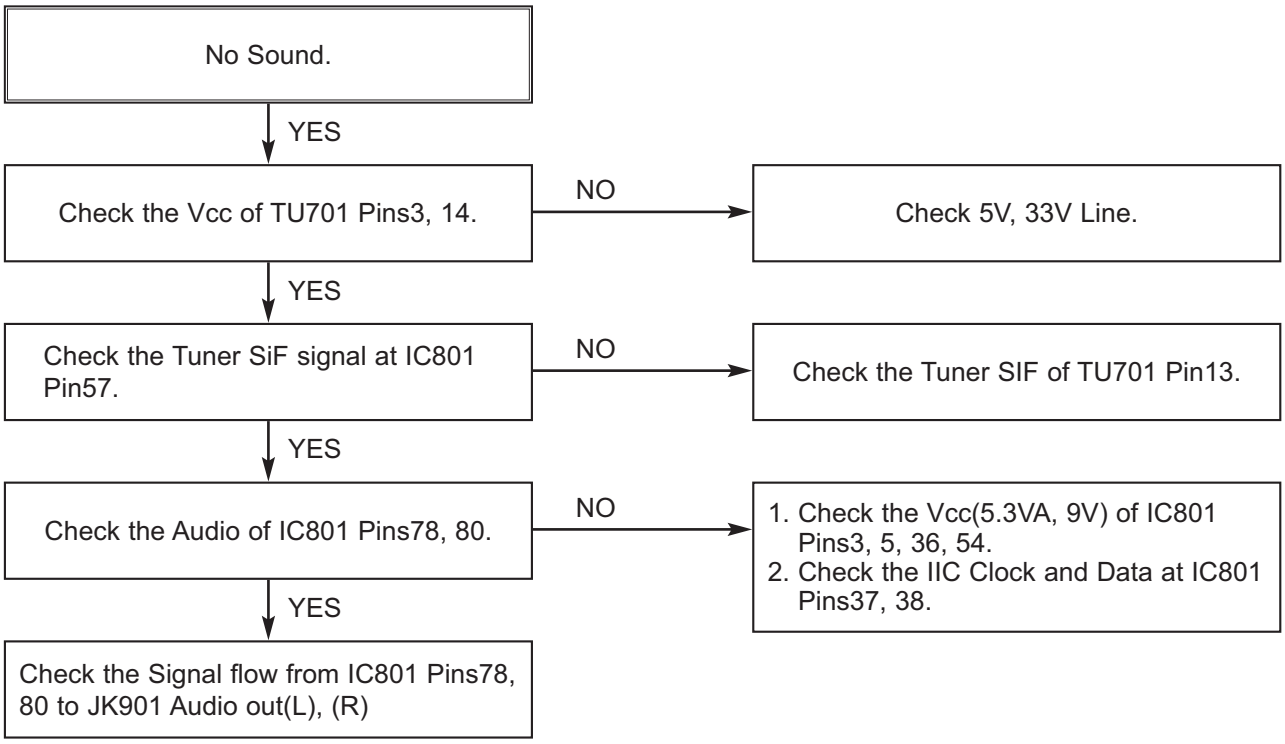

Hi-Fi REC.
YES
It is impossible to record Hi-Fi Audio signal.
YES
Check Vcc of IC801.
(Pins3, 5, 15, 32, 36, 46, 54)
NO
Check Power.
YES
Check IC801 Pin37(Data), Pin38(CLOCK).
NO
Check ports of µ-CPM.
(IC501 Pins71, 72)
YES
Do Audio signals appear at IC801 Pin6?
NO
Check Audio input signal of IC801
Pin57(TU.A.), 7, 69(DVD.A.),
11, 73(LINE1.A.), 9, 71(LINE2.A.)
YES
Do Audio signals appear at IC301
Pin76(Normal Audio)?
NO
Check C825, R337, R338, C371, C3A1
YES
Do OSC signals appear at P3D02 pin5
(50Vp-p)
NO
Check REC OSC BLOCK
(Q301, Q302, Q304~Q307)
YES
Is "High" IC501 Pin74 in REC mode.

5.1.7 Tuner/IF CIRCUIT

(1) No Picture on the TV screen


No picture on the TV screen
YES
Does the Video signal at the TU701 Pin16.
NO
Is +33V applied to TU701 Pin14?
NO
Check 33V line.
YES
YES
Is +5V applied to TU701 Pin3?
NO
Check 5V line.
YES
Does the Clock signal appear at TU701 Pin9?
NO
Check the IIC Clock Signal of µ-COM Pin71.
YES
Does the data signal appear at TU701 Pin10?
NO
Check the IIC Data Signal of µ-COM Pin72.
YES
Replace Tuner.
Does the Video signal at the IC501 Pin 52.
NO
Check the signal from IC301 Pin29 to IC501 Pin50.
YES
Does the Video signal at the JK901
NO
Check the signal from IC501 Pin52 to Q924
YES
Check the signal flow from IC501 Pin52 to JK901 Pin Video out.

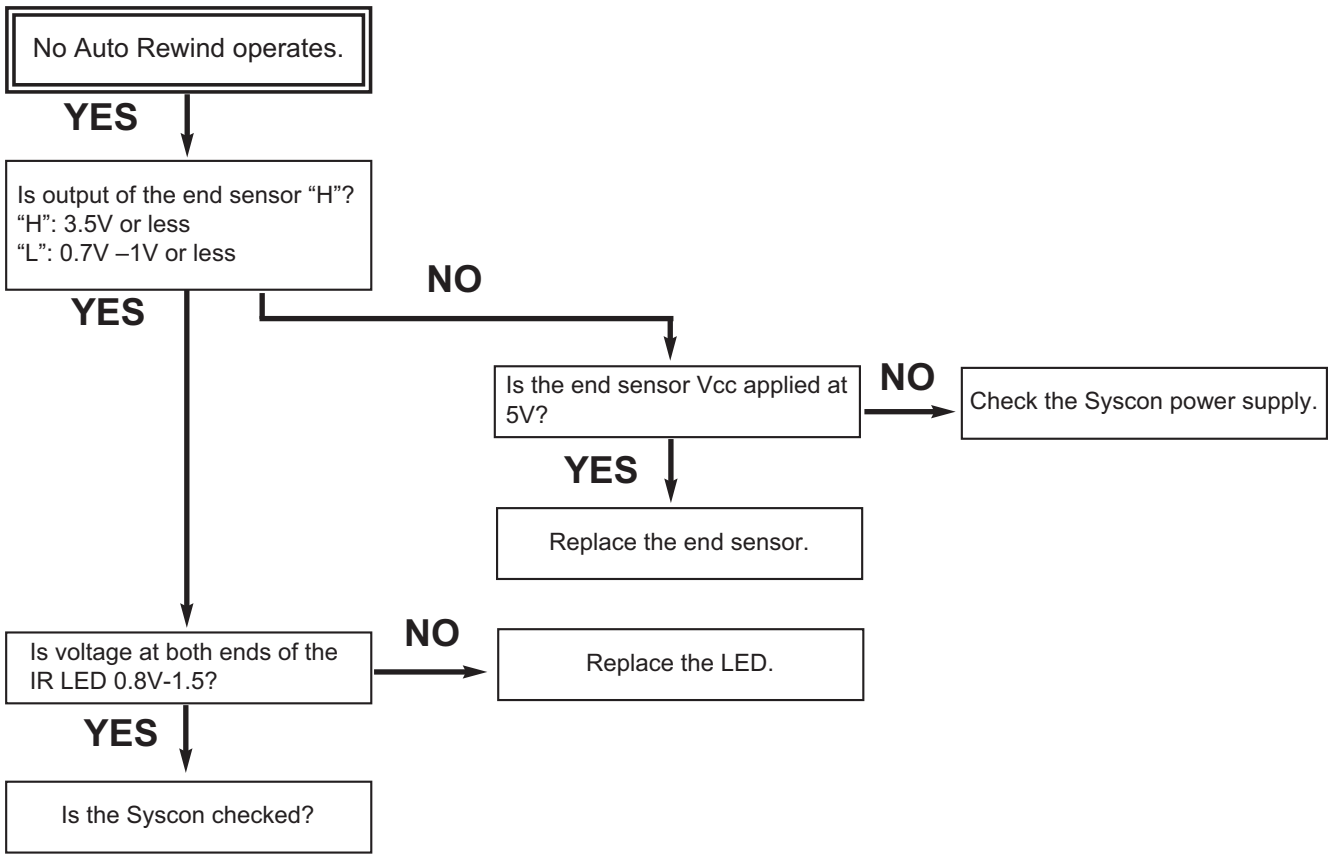
(2) No Sound


No Sound.
YES
Check the Vcc of TU701 Pins3, 14.
NO
Check 5V, 33V Line.
YES
Check the Tuner SiF signal at IC801 Pin57.
NO
Check the Tuner SIF of TU701 Pin13.
YES
Check the Audio of IC801 Pins78, 80.
NO
1. Check the Vcc(5.3VA, 9V) of IC801 Pins3, 5, 36, 54.
2. Check the IIC Clock and Data at IC801 Pins37, 38.
YES
Check the Signal flow from IC801 Pins78, 80 to JK901 Audio out(L), (R)

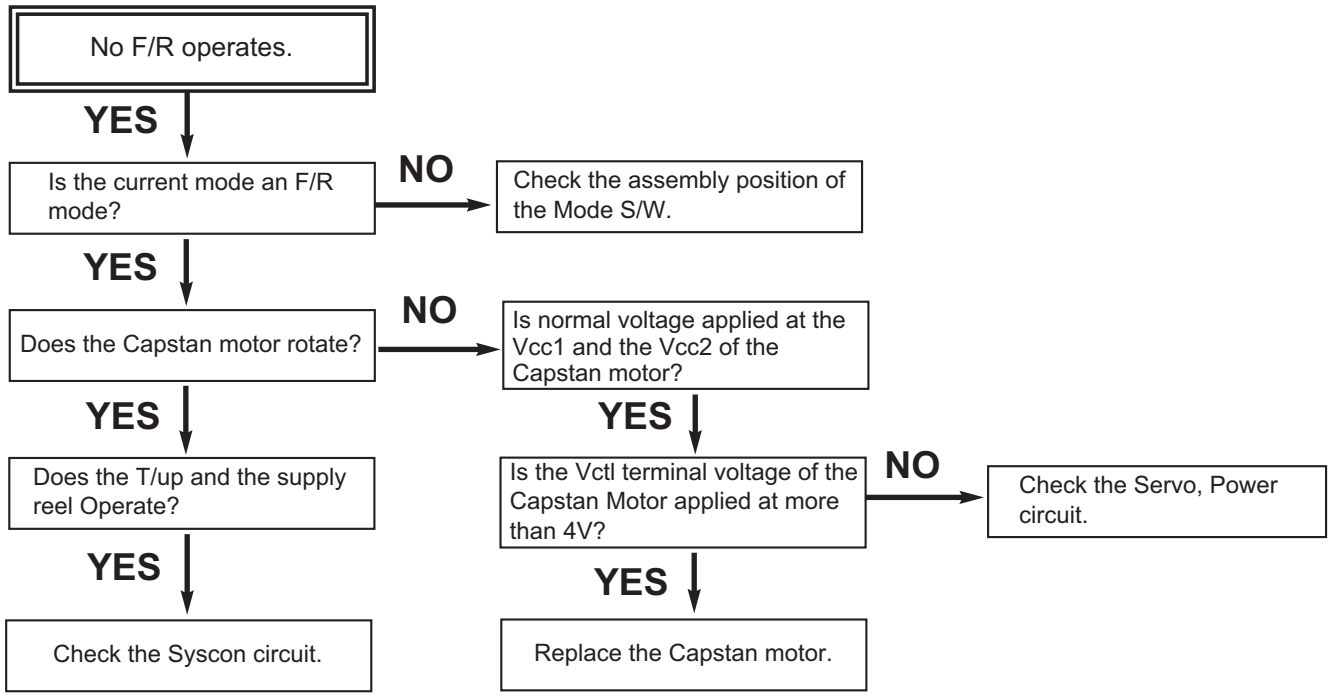
5.2 MECHANISM TROUBLESHOOTING GUIDE (VCR PART)

5.2.1 Deck Mechanism

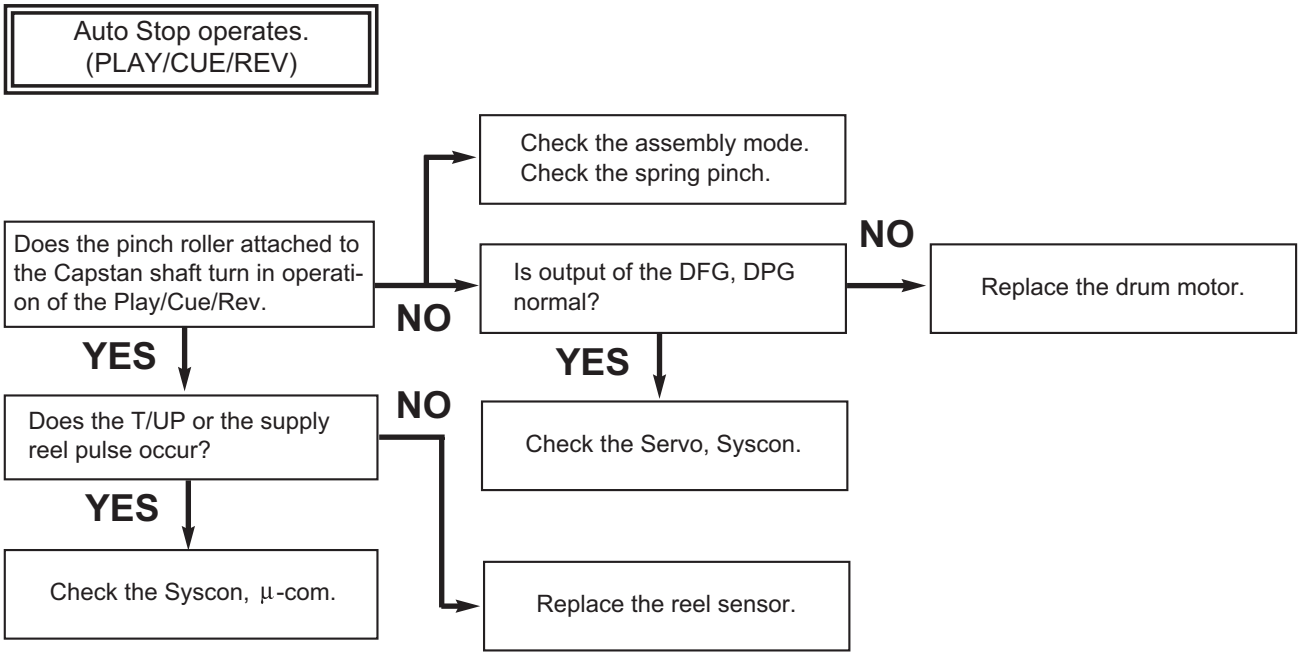
A.



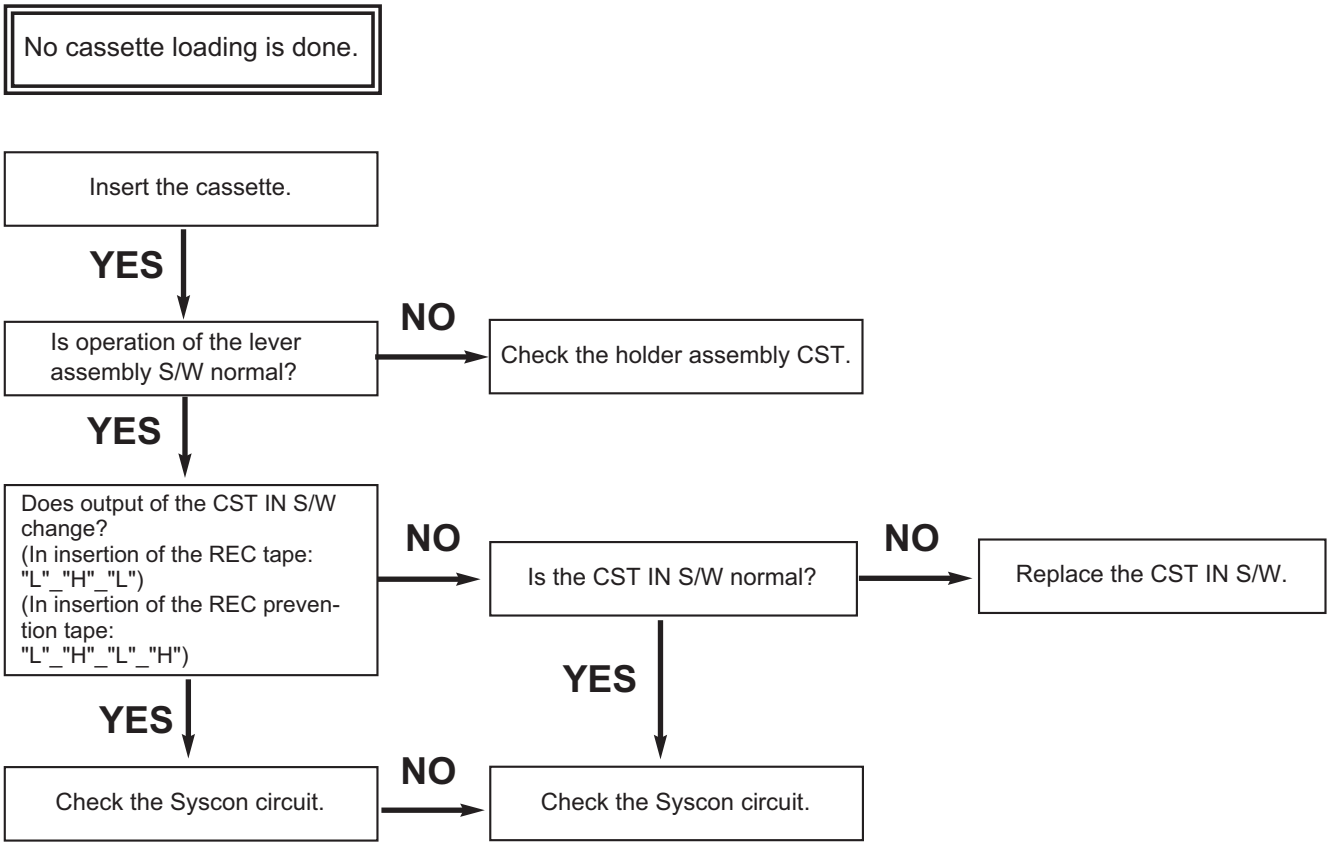
B.


No F/R operates.
YES
Is the current mode an F/R mode?
NO
Check the assembly position of the Mode S/W.
YES
Does the Capstan motor rotate?
NO
Is normal voltage applied at the Vcc1 and the Vcc2 of the Capstan motor?
YES
YES
Does the T/up and the supply reel Operate?
Is the Vctl terminal voltage of the Capstan Motor applied at more than 4V?
NO
Check the Servo, Power circuit.
YES
YES
Check the Syscon circuit.
Replace the Capstan motor.

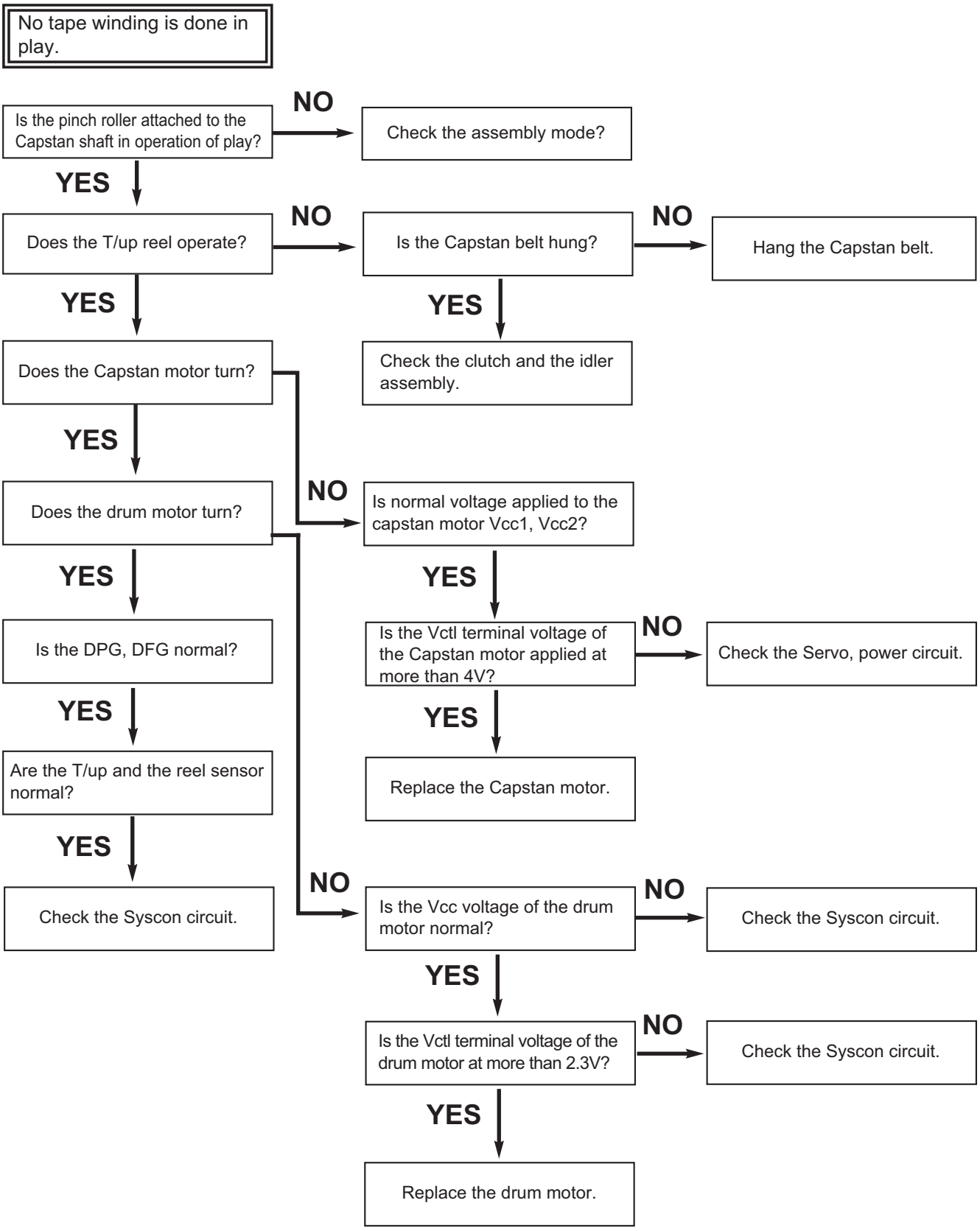
C.


Auto Stop operates.
(PLAY/CUE/REV)
Does the pinch roller attached to the Capstan shaft turn in operation of the Play/Cue/Rev.
Check the assembly mode.
Check the spring pinch.
NO
Is output of the DFG, DPG normal?
NO
Replace the drum motor.
YES
YES
Does the T/UP or the supply reel pulse occur?
NO
Check the Servo, Syscon.
YES
Check the Syscon, μ-com.
Replace the reel sensor.

D.

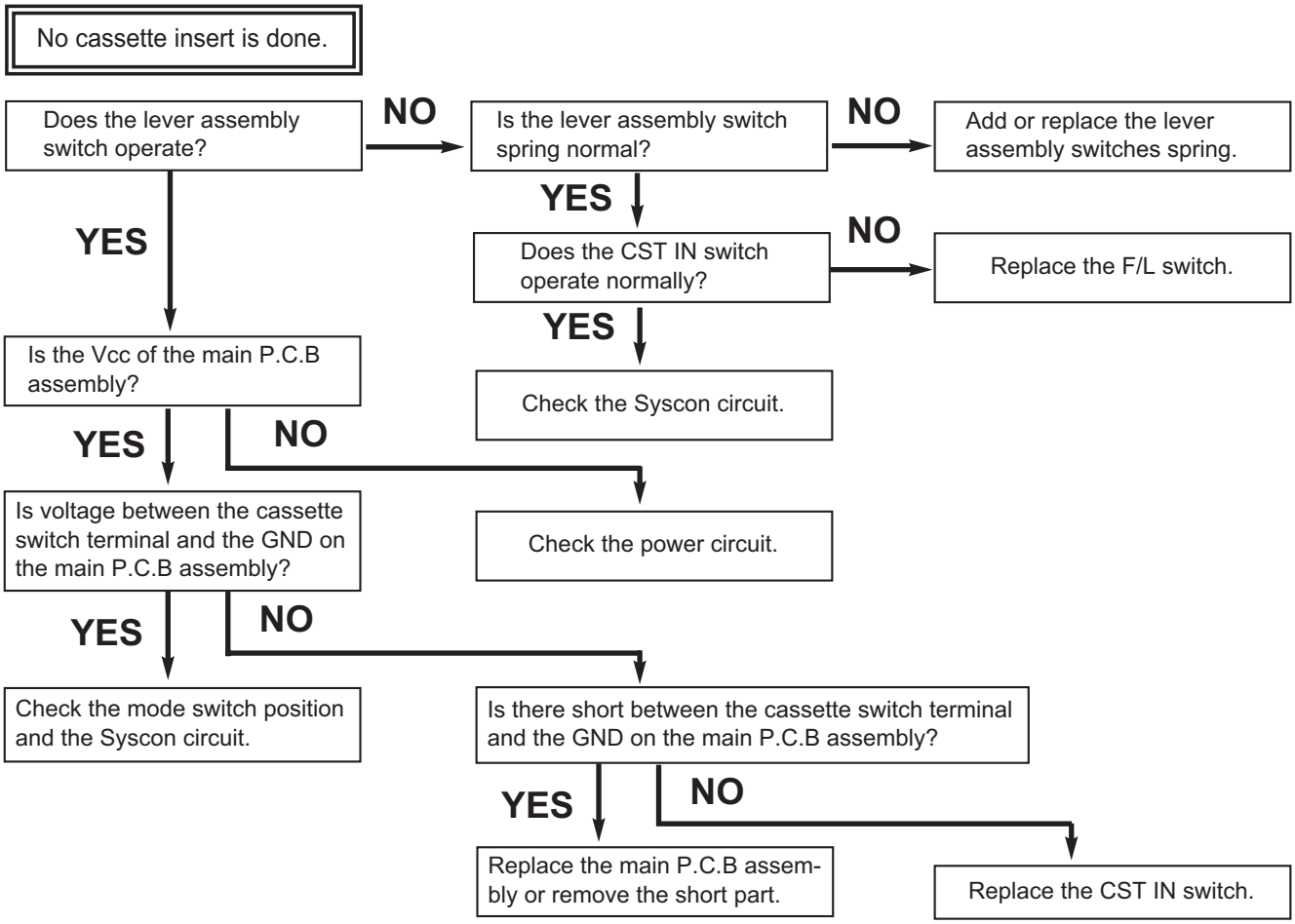

No cassette loading is done.
Insert the cassette.
YES
Is operation of the lever assembly S/W normal?
NO
Check the holder assembly CST.
YES
Does output of the CST IN S/W change?
(In insertion of the REC tape: "L"_"H"_"L")
(In insertion of the REC prevention tape: "L"_"H"_"L"_"H")
NO
Is the CST IN S/W normal?
NO
Replace the CST IN S/W.
YES
YES
Check the Syscon circuit.
NO
Check the Syscon circuit.

E.

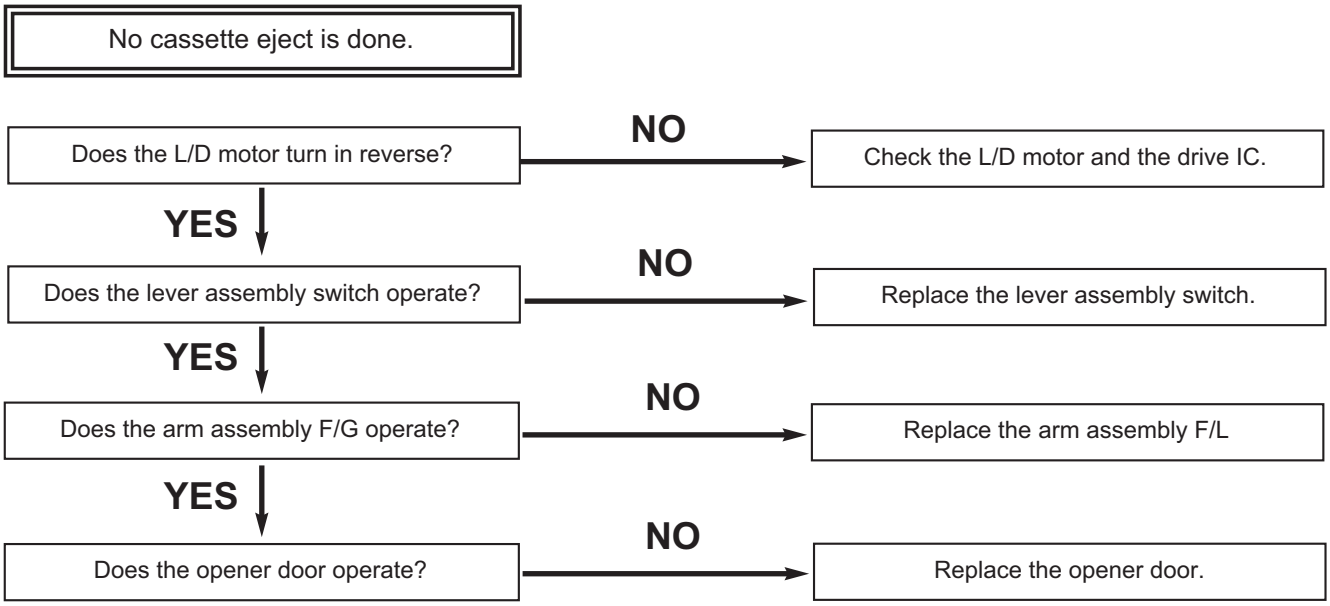

No tape winding is done in play.
Is the pinch roller attached to the Capstan shaft in operation of play?
NO
Check the assembly mode?
YES
Does the T/up reel operate?
NO
Is the Capstan belt hung?
NO
Hang the Capstan belt.
YES
YES
Check the clutch and the idler assembly.
Does the Capstan motor turn?
YES
Does the drum motor turn?
NO
Is normal voltage applied to the capstan motor Vcc1, Vcc2?
YES
YES
Is the DPG, DFG normal?
Is the Vctl terminal voltage of the Capstan motor applied at more than 4V?
NO
Check the Servo, power circuit.
YES
YES
Are the T/up and the reel sensor normal?
Replace the Capstan motor.
YES
NO
Check the Syscon circuit.
Is the Vcc voltage of the drum motor normal?
NO
Check the Syscon circuit.
YES
Is the Vctl terminal voltage of the drum motor at more than 2.3V?
NO
Check the Syscon circuit.
YES
Replace the drum motor.

5.2.2 Front Loading Mechanism

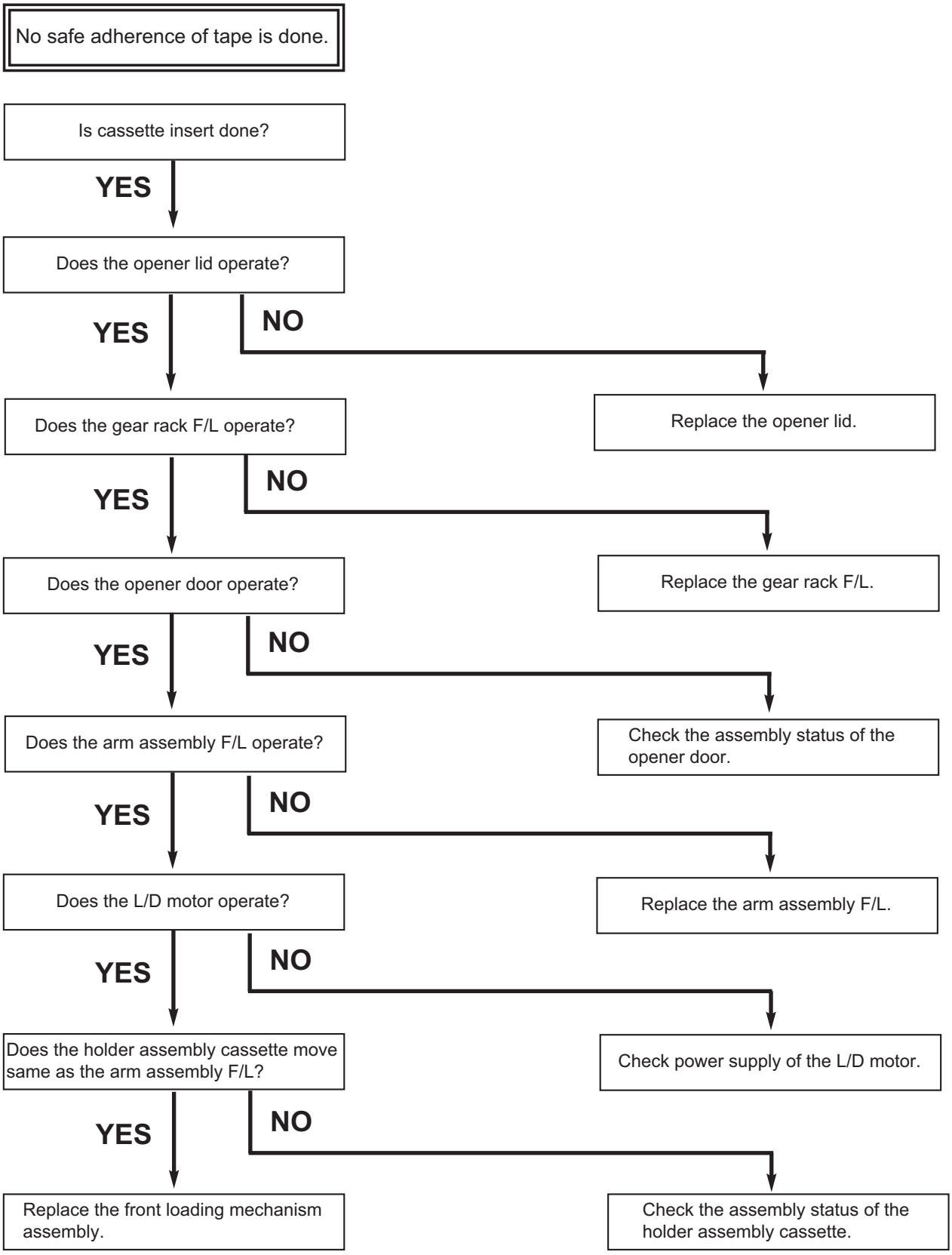
A.


No cassette insert is done.
Does the lever assembly switch operate?
NO
Is the lever assembly switch spring normal?
NO
Add or replace the lever assembly switches spring.
YES
YES
Does the CST IN switch operate normally?
NO
Replace the F/L switch.
YES
Check the Syscon circuit.
Is the Vcc of the main P.C.B assembly?
YES
NO
Check the power circuit.
Is voltage between the cassette switch terminal and the GND on the main P.C.B assembly?
YES
NO
Check the mode switch position and the Syscon circuit.
Is there short between the cassette switch terminal and the GND on the main P.C.B assembly?
YES
NO
Replace the main P.C.B assembly or remove the short part.
Replace the CST IN switch.

B.

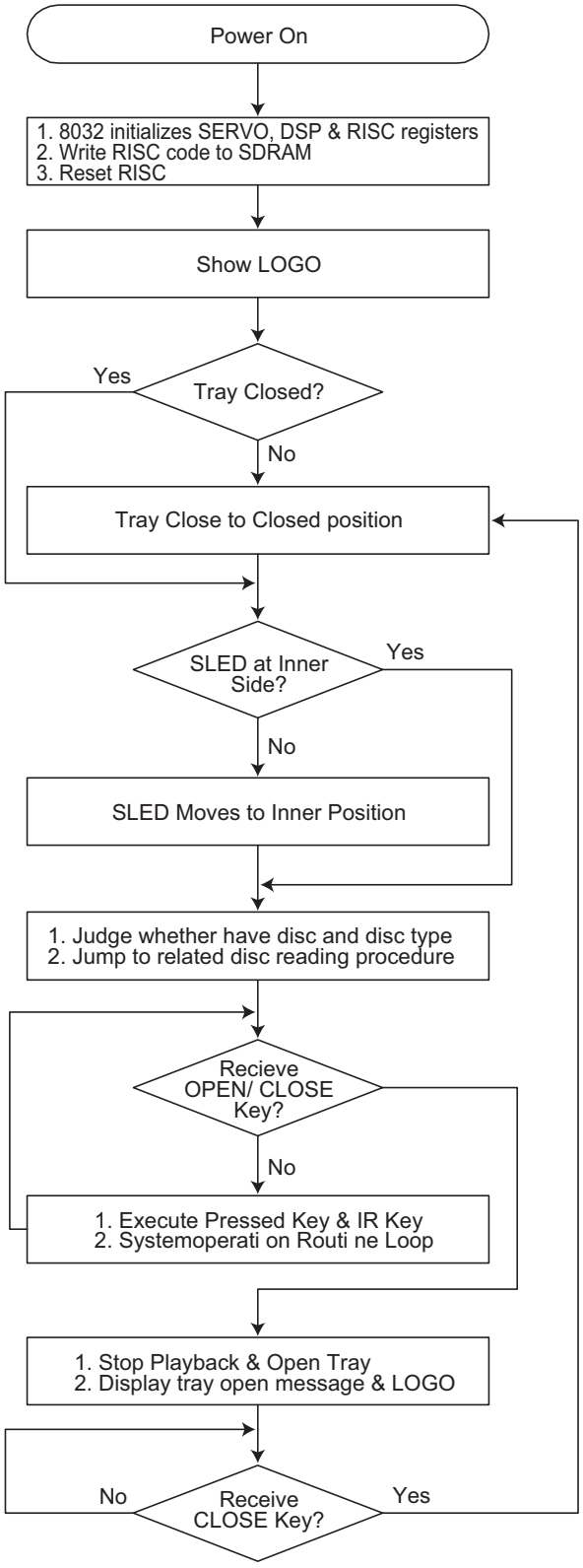


C.

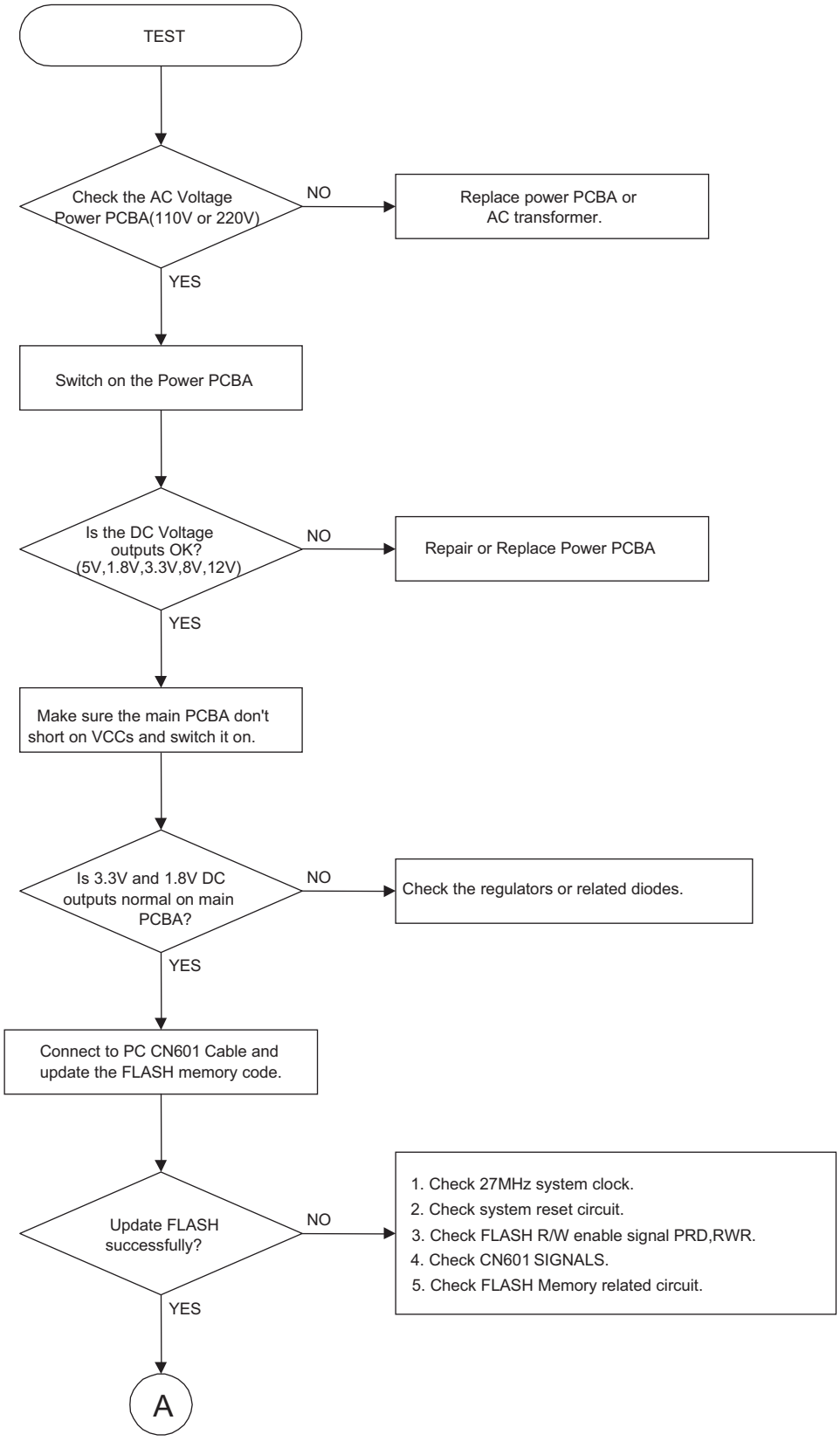

No safe adherence of tape is done.
Is cassette insert done?
YES
Does the opener lid operate?
YES
NO
Replace the opener lid.
Does the gear rack F/L operate?
YES
NO
Replace the gear rack F/L.
Does the opener door operate?
YES
NO
Check the assembly status of the opener door.
Does the arm assembly F/L operate?
YES
NO
Replace the arm assembly F/L.
Does the L/D motor operate?
YES
NO
Check power supply of the L/D motor.
Does the holder assembly cassette move same as the arm assembly F/L?
YES
NO
Check the assembly status of the holder assembly cassette.
Replace the front loading mechanism assembly.

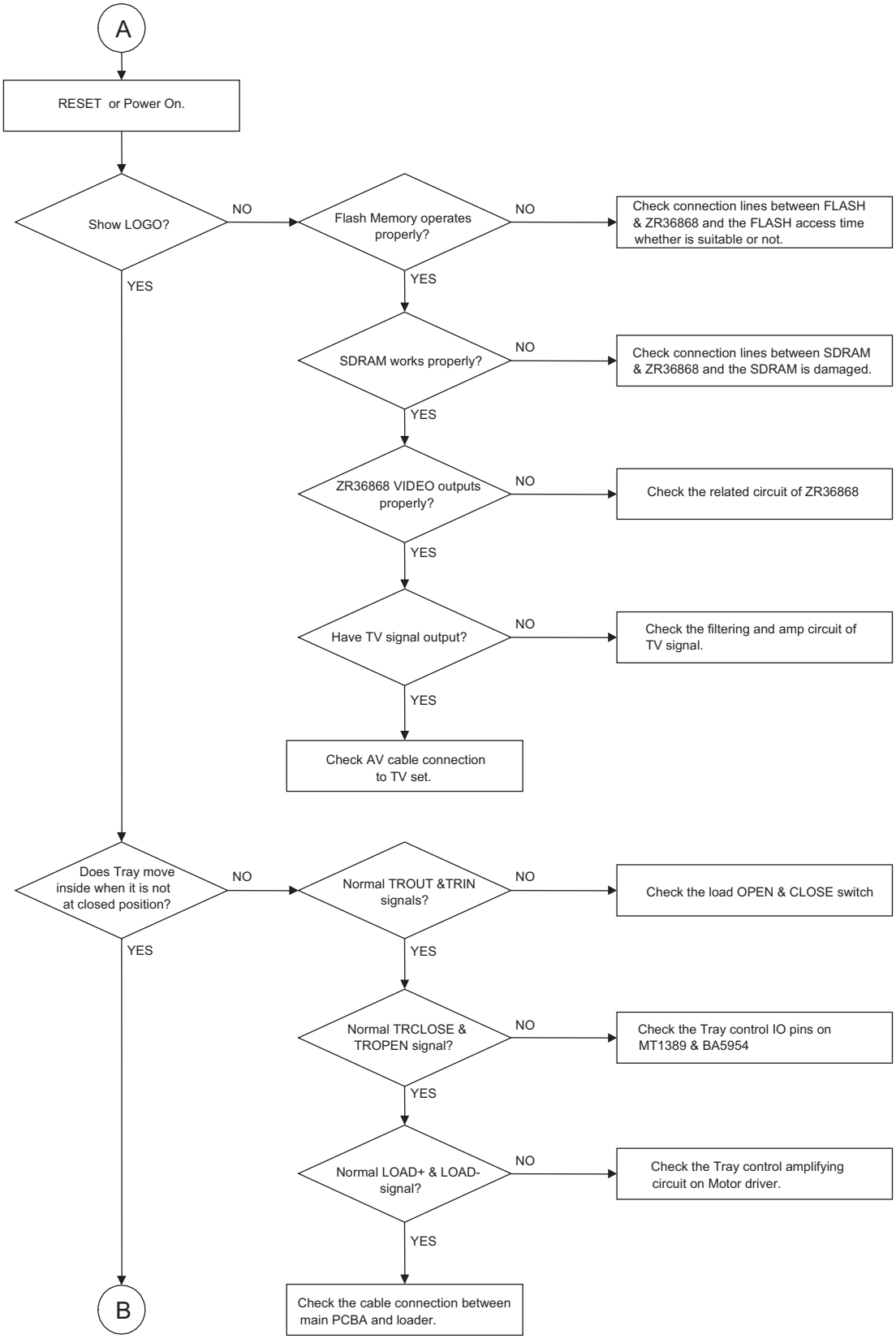
5.3 ELECTRICAL TROUBLESHOOTING GUIDE (DVD PART)

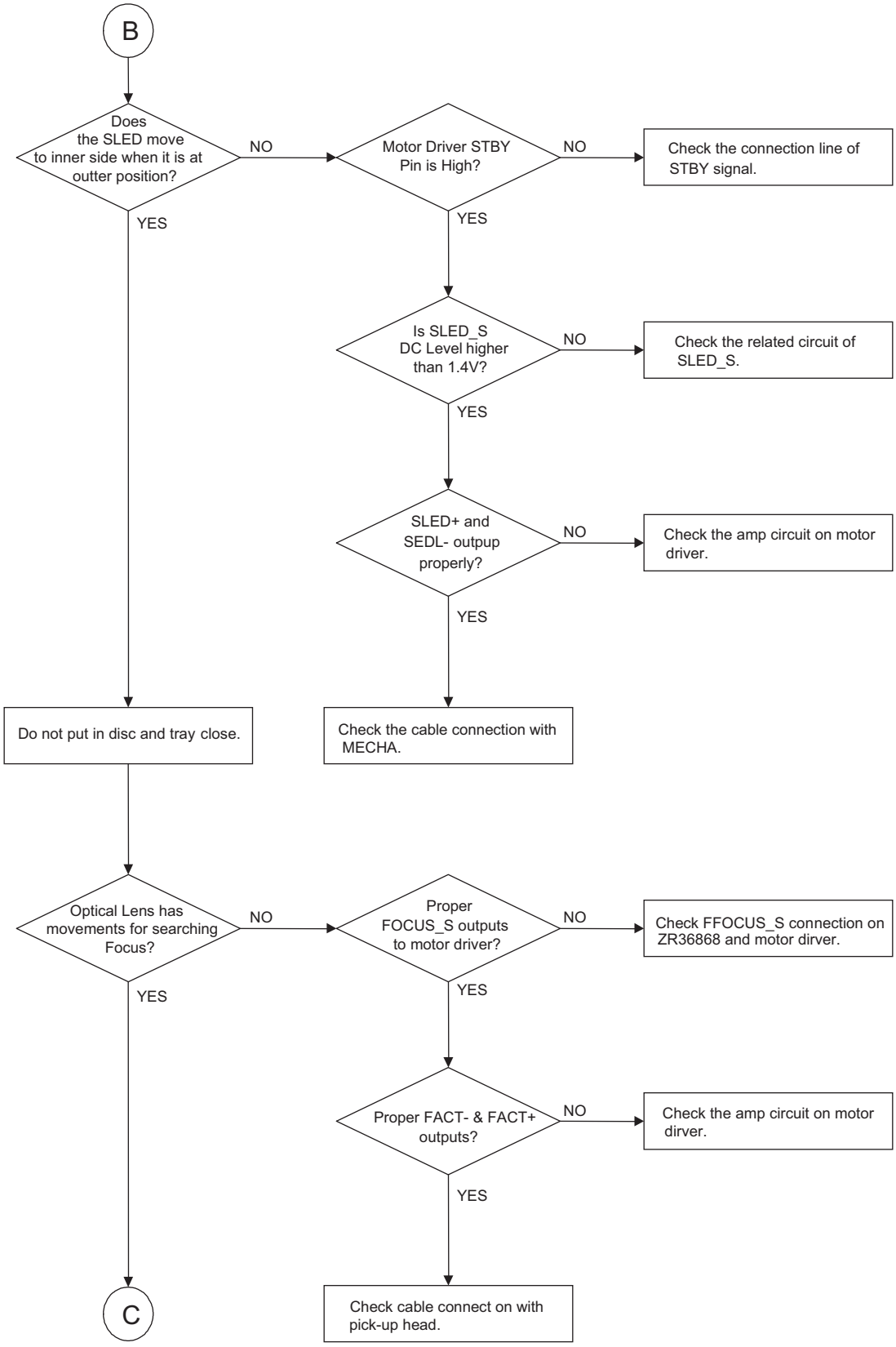
5.3.1 System operation flow

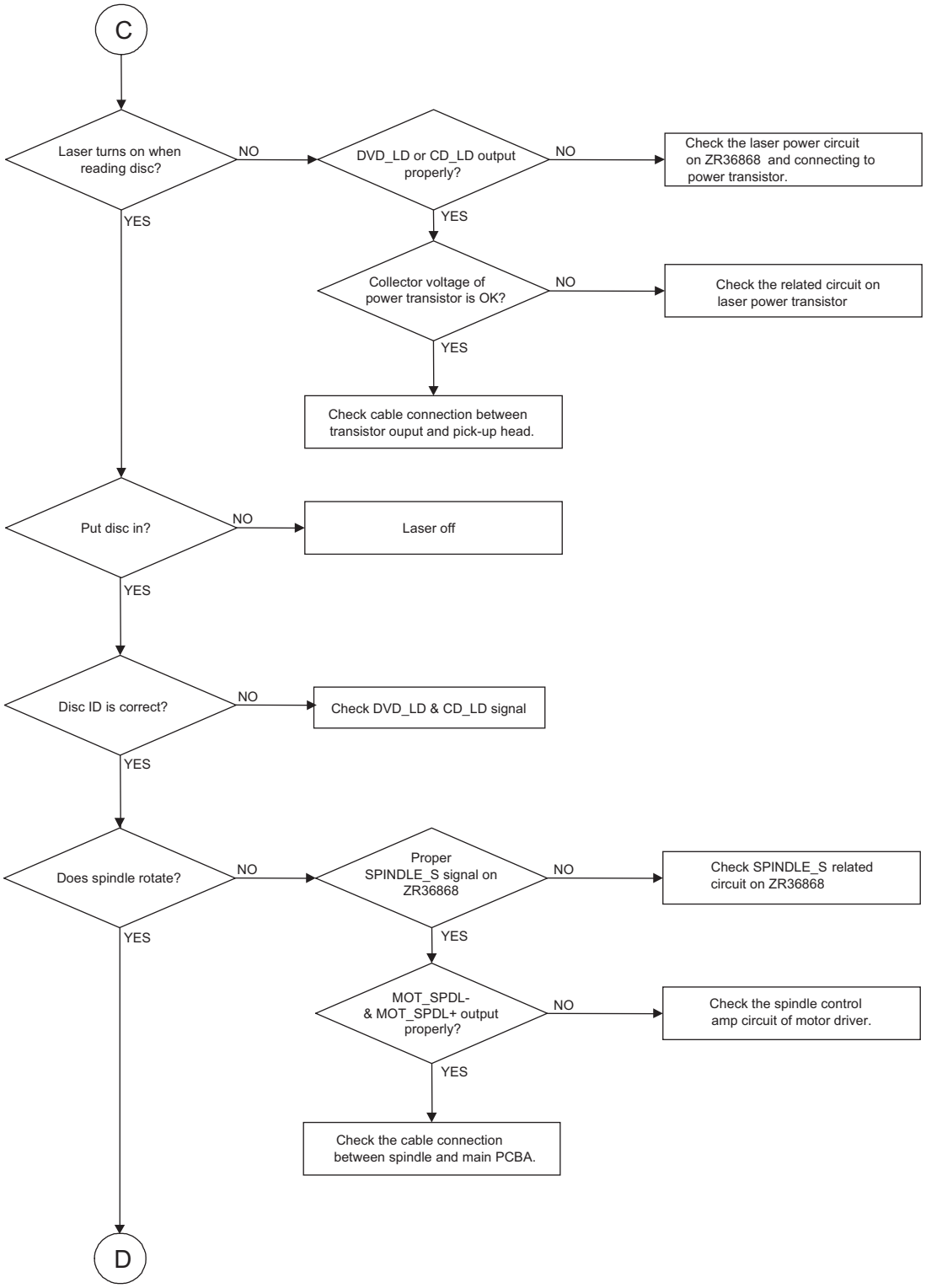


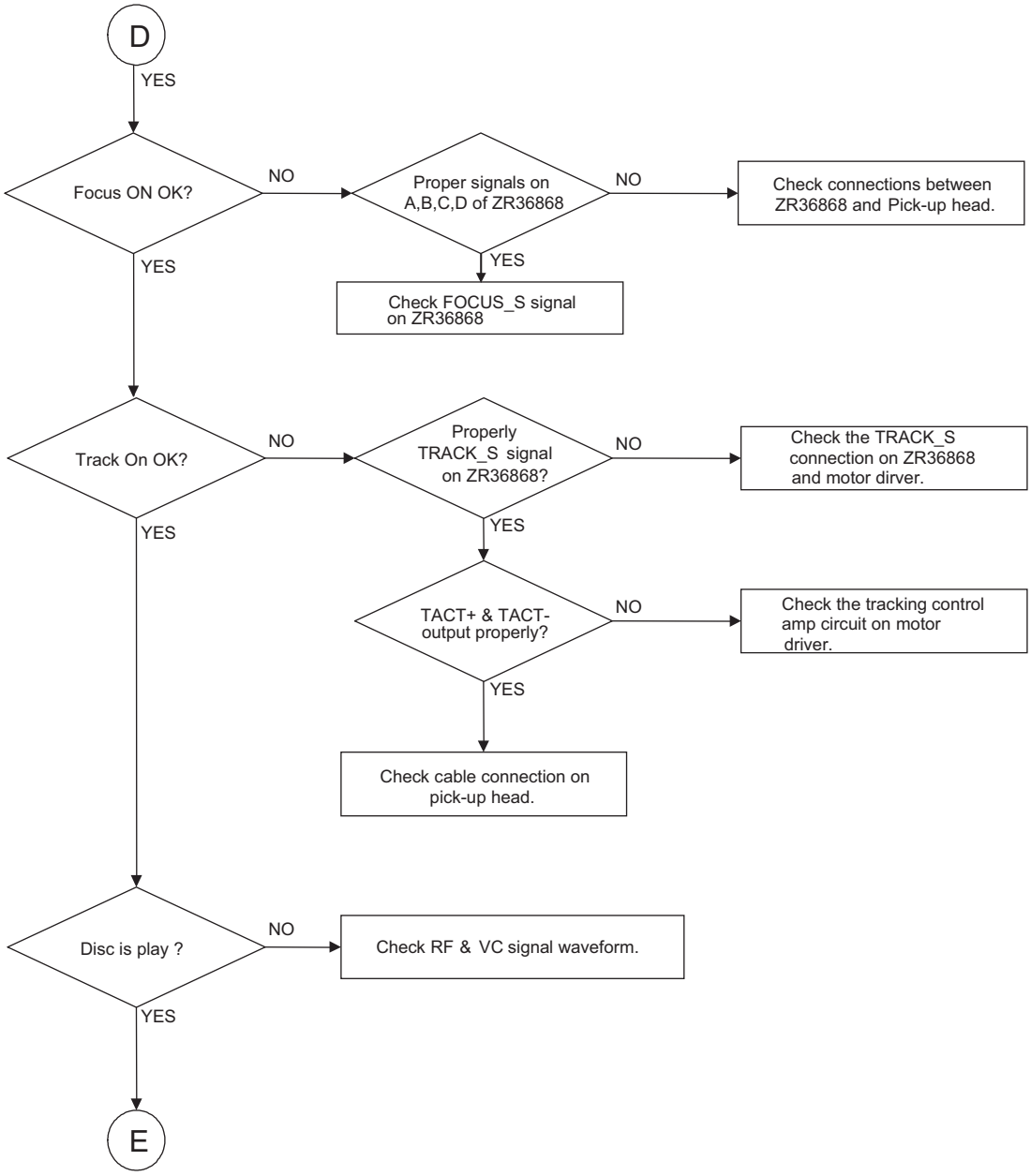
5.3.2 SYSTEM Test flow

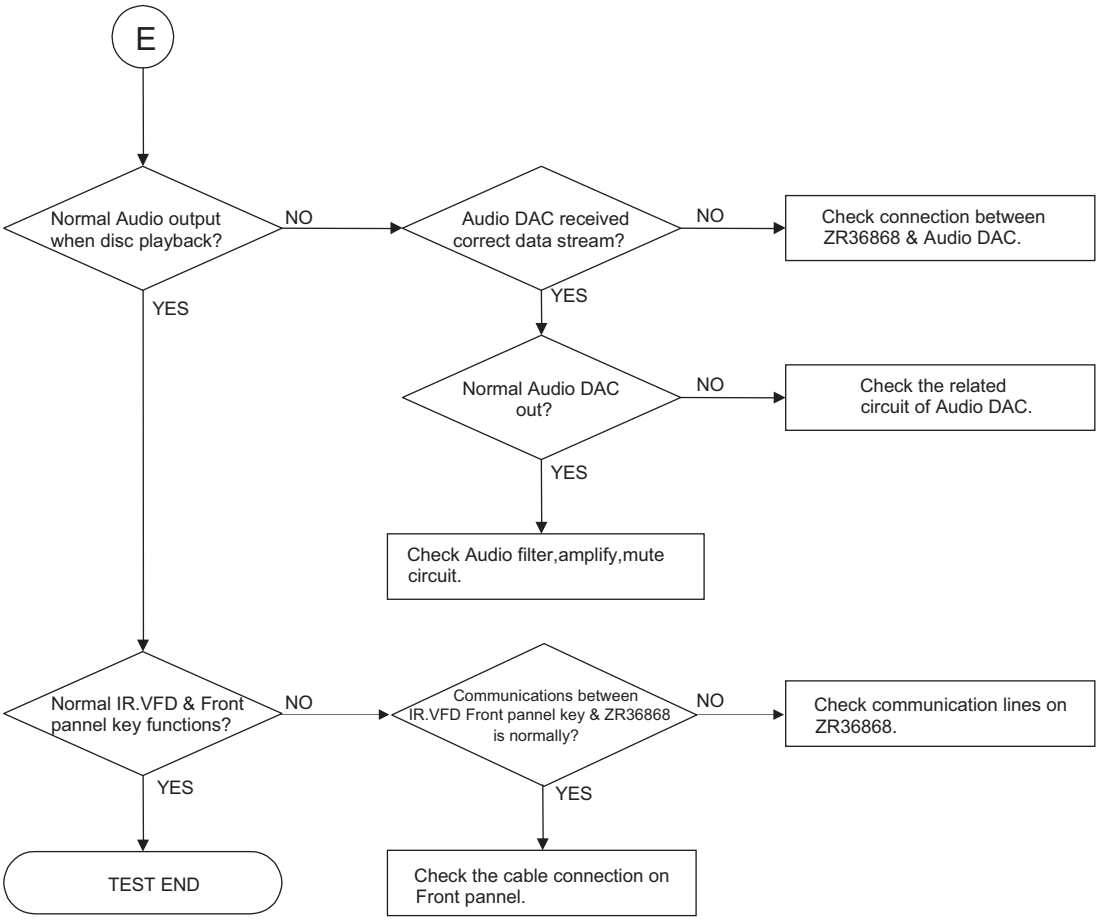

TEST
Check the AC Voltage Power PCBA(110V or 220V)
NO
Replace power PCBA or AC transformer.
YES
Switch on the Power PCBA
Is the DC Voltage outputs OK? (5V,1.8V,3.3V,8V,12V)
NO
Repair or Replace Power PCBA
YES
Make sure the main PCBA don't short on VCCs and switch it on.
Is 3.3V and 1.8V DC outputs normal on main PCBA?
NO
Check the regulators or related diodes.
YES
Connect to PC CN601 Cable and update the FLASH memory code.
Update FLASH successfully?
NO
1. Check 27MHz system clock.
2. Check system reset circuit.
3. Check FLASH R/W enable signal PRD,RWR.
4. Check CN601 SIGNALS.
5. Check FLASH Memory related circuit.
YES
A


A
RESET or Power On.
Show LOGO?
NO
YES
Flash Memory operates properly?
NO
Check connection lines between FLASH & ZR36868 and the FLASH access time whether is suitable or not.
YES
SDRAM works properly?
NO
Check connection lines between SDRAM & ZR36868 and the SDRAM is damaged.
YES
ZR36868 VIDEO outputs properly?
NO
Check the related circuit of ZR36868
YES
Have TV signal output?
NO
Check the filtering and amp circuit of TV signal.
YES
Check AV cable connection to TV set.
Does Tray move inside when it is not at closed position?
NO
YES
Normal TROUT &TRIN signals?
NO
Check the load OPEN & CLOSE switch
YES
Normal TRCLOSE & TROPEN signal?
NO
Check the Tray control IO pins on MT1389 & BA5954
YES
Normal LOAD+ & LOAD- signal?
NO
Check the Tray control amplifying circuit on Motor driver.
YES
Check the cable connection between main PCBA and loader.
B


B
Does the SLED move to inner side when it is at outter position?
NO
YES
Motor Driver STBY Pin is High?
NO
YES
Check the connection line of STBY signal.
Is SLED_S DC Level higher than 1.4V?
NO
YES
Check the related circuit of SLED_S.
SLED+ and SEDL- outpup properly?
NO
YES
Check the amp circuit on motor driver.
Do not put in disc and tray close.
Check the cable connection with MECHA.
Optical Lens has movements for searching Focus?
NO
YES
Proper FOCUS_S outputs to motor driver?
NO
YES
Check FFOCUS_S connection on ZR36868 and motor dirver.
Proper FACT- & FACT+ outputs?
NO
YES
Check the amp circuit on motor dirver.
C
Check cable connect on with pick-up head.


C
Laser turns on when reading disc?
NO
DVD_LD or CD_LD output properly?
NO
Check the laser power circuit on ZR36868 and connecting to power transistor.
YES
YES
Collector voltage of power transistor is OK?
NO
Check the related circuit on laser power transistor
YES
Check cable connection between transistor ouput and pick-up head.
Put disc in?
NO
Laser off
YES
Disc ID is correct?
NO
Check DVD_LD & CD_LD signal
YES
Does spindle rotate?
NO
Proper SPINDLE_S signal on ZR36868
NO
Check SPINDLE_S related circuit on ZR36868
YES
YES
MOT_SPDL- & MOT_SPDL+ output properly?
NO
Check the spindle control amp circuit of motor driver.
YES
Check the cable connection between spindle and main PCBA.
D

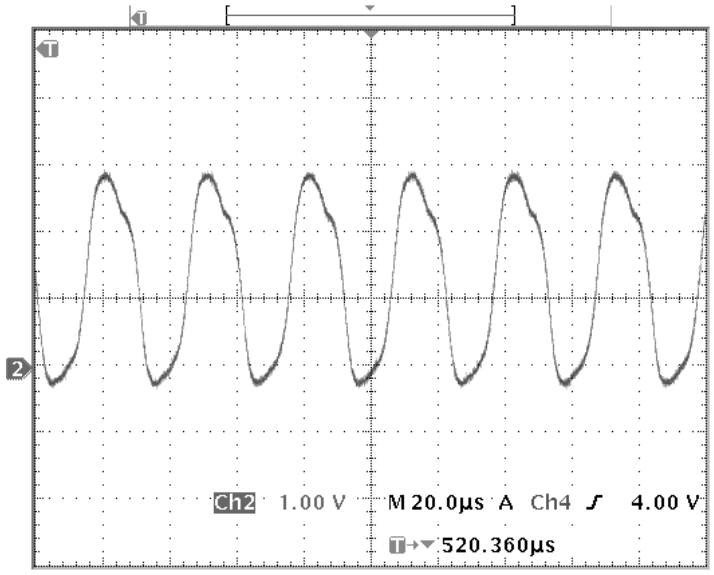

D
YES
Focus ON OK?
NO
Proper signals on A,B,C,D of ZR36868
NO
Check connections between ZR36868 and Pick-up head.
YES
YES
Check FOCUS_S signal on ZR36868
Track On OK?
NO
Properly TRACK_S signal on ZR36868?
NO
Check the TRACK_S connection on ZR36868 and motor dirver.
YES
YES
TACT+ & TACT- output properly?
NO
Check the tracking control amp circuit on motor driver.
YES
Check cable connection on pick-up head.
Disc is play ?
NO
Check RF & VC signal waveform.
YES
E


E
Normal Audio output when disc playback?
NO
Audio DAC received correct data stream?
NO
Check connection between ZR36868 & Audio DAC.
YES
YES
Normal Audio DAC out?
NO
Check the related circuit of Audio DAC.
YES
Check Audio filter,amplify,mute circuit.
Normal IR.VFD & Front pannel key functions?
NO
Communications between IR.VFD Front pannel key & ZR36868 is normally?
NO
Check communication lines on ZR36868.
YES
YES
TEST END
Check the cable connection on Front pannel.

5.4 DETAILS AND WAVEFORMS ON SYSTEM TEST AND DEBUGGING

5.4.1 SYSTEM 27MHz CLOCK, RESET, FLASH R/W SIGNAL

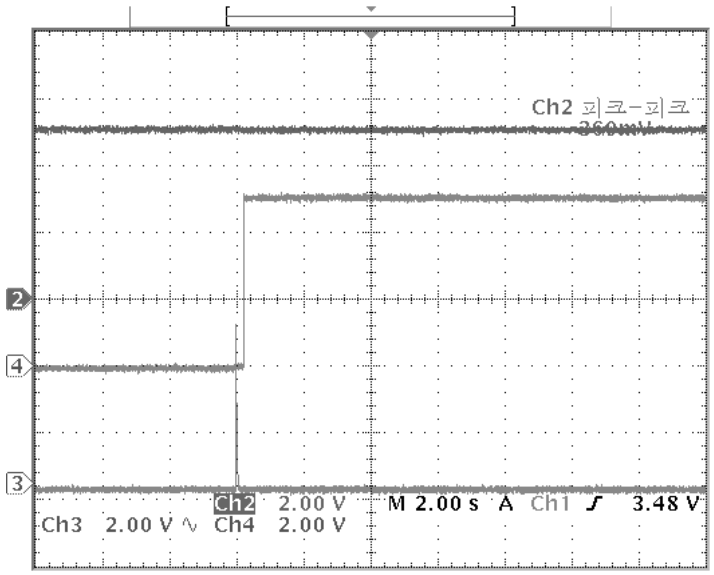
1) ZR36868 main clock is at 27MHz(X501)



1.0V, 27MHz

FIG 1-1

2) ZR36868 reset is low active



5.3VA

PWR_CTL_H

M_RESET(FRONT)

FIG 1-2

3) CN601 waveform during procedure(Downloading)

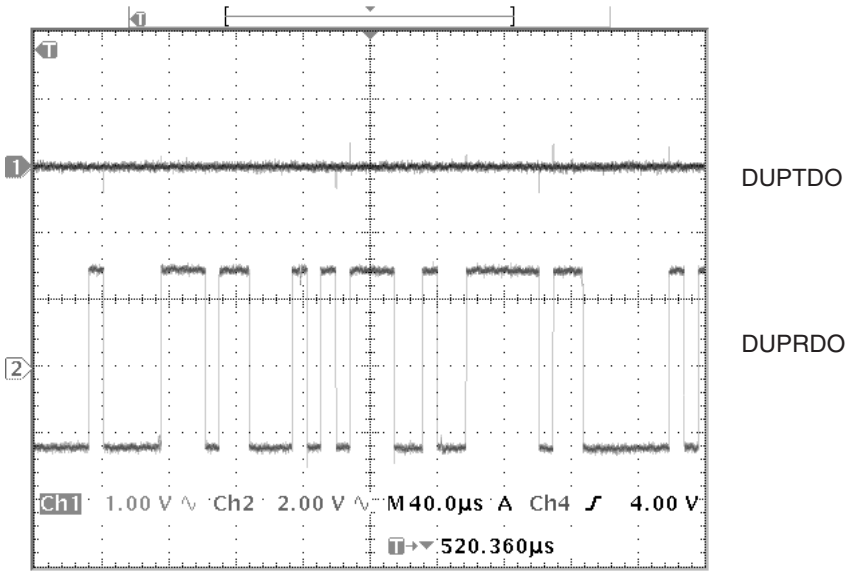


FIG 1-3

4) Flash R/W enable signal during download(Downloading)

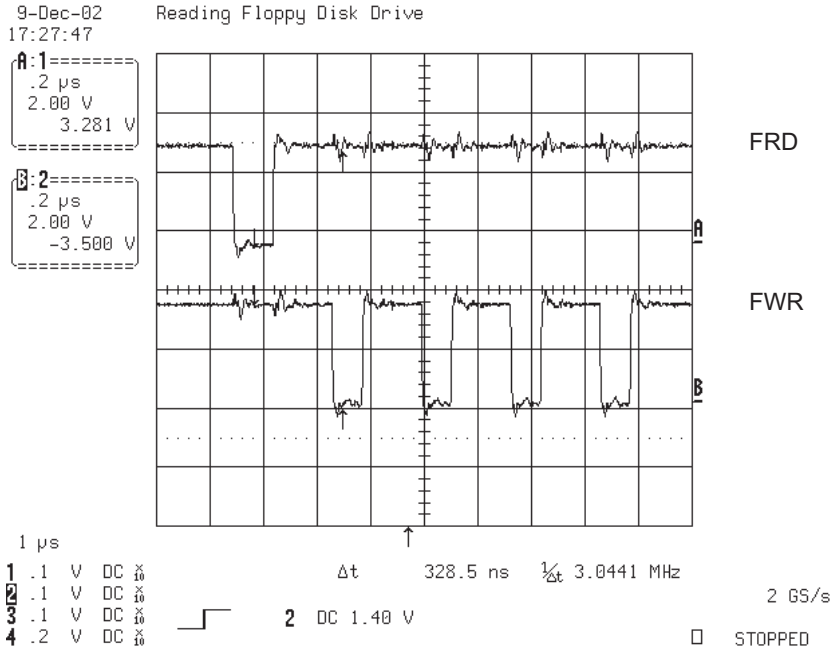


FIG 1-4

5.4.2 SDRAM CLOCK

DCLK = 135MHz, Vp-p=2.2, Vmax=2.7V

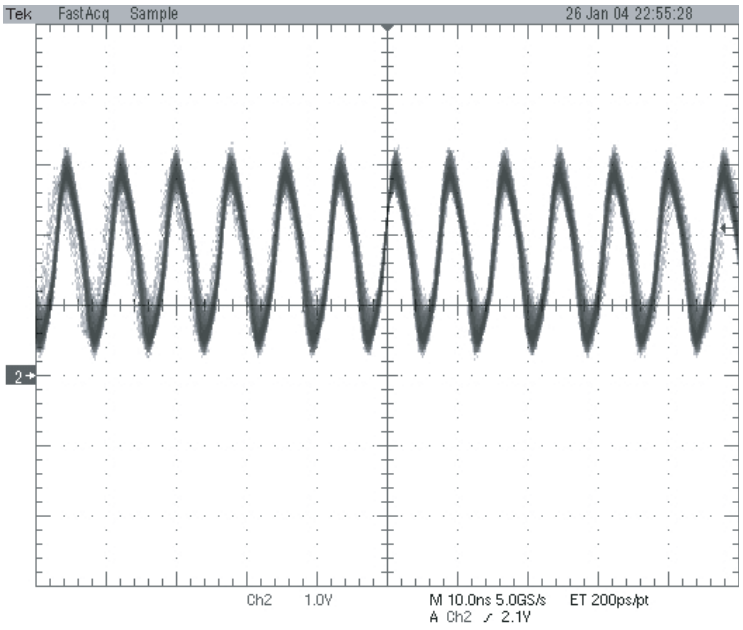
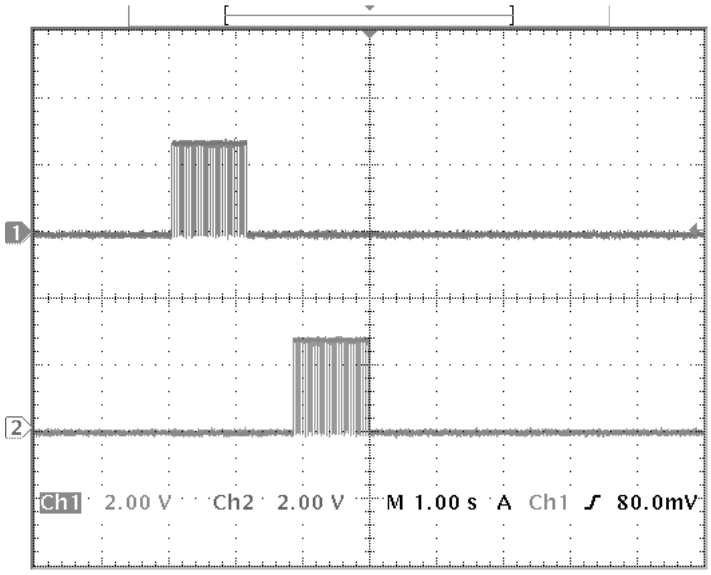


FIG 2-1

5.4.3 TRAY OPEN/CLOSE SIGNAL

1) Tray open/close waveform

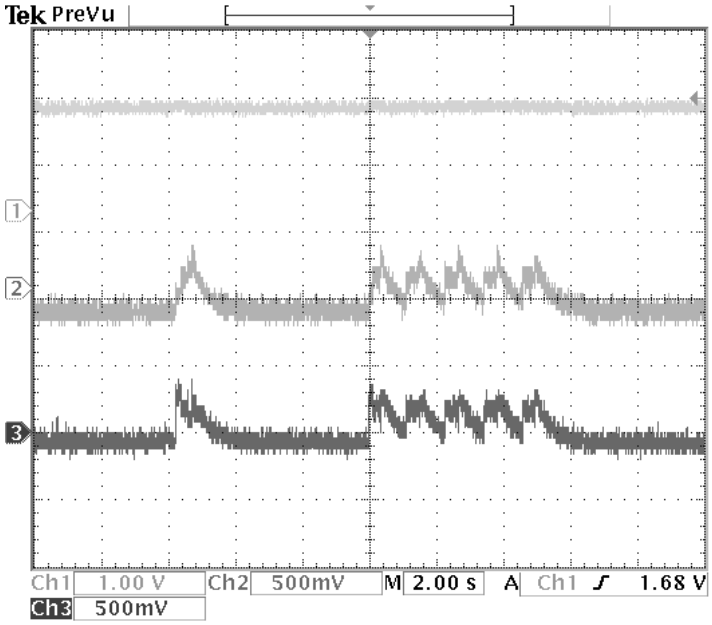


OPEN

CLOSE

FIG 3-1

5.4.4 SLED CONTROL RELATED SIGNAL (NO DISC CONDITION)



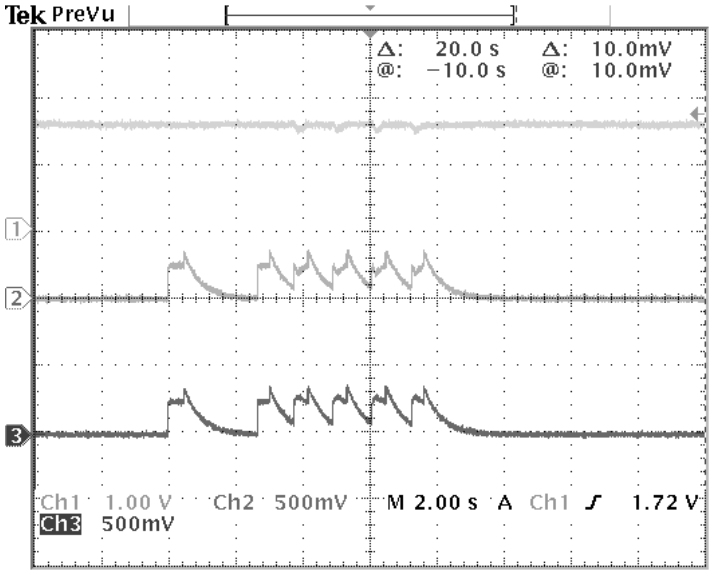
SLED_S(2.0V/1.4V/1.0V)

SLED+(4.7V/4.0V/2.6V)

SLED-(5.3V/4.0V/3.0V)

FIG 4-1

5.4.5 LENS CONTROL RELATED SIGNAL(NO DISC CONDITION)



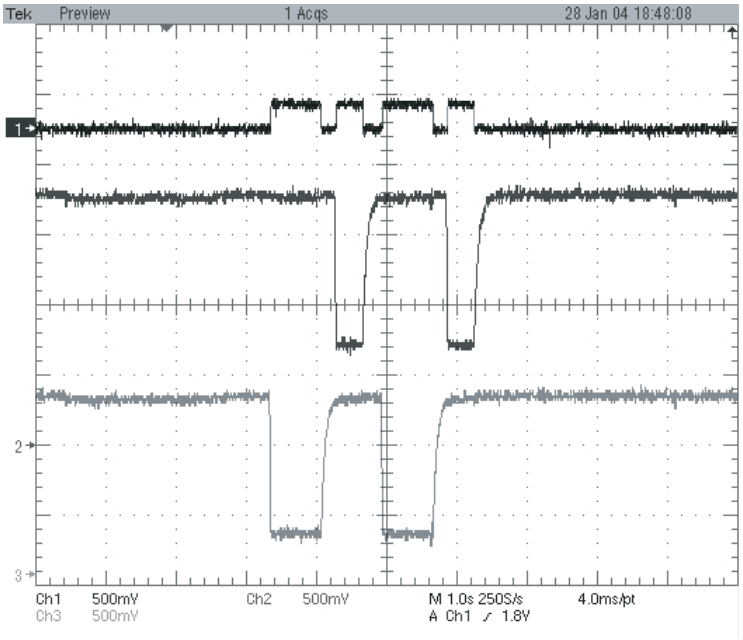
FOCUS_S(1.5V/1.4V/1.3V)

FACT+(4.0V/3.6V/3.2V)

FACT-(4.0V/3.6V/3.2V)

FIG 5-1

5.4.6 LASER POWER CONTROL RELATED SIGNAL(NO DISC CONDITION)



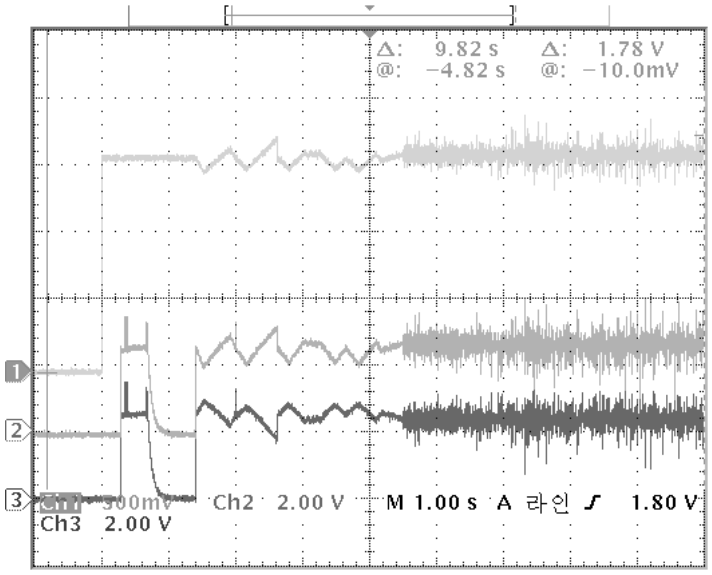
MD_CD(0V/180mV)

MD_LD(5.0V//3.5V)

DVD_LD(5.0V/3.6V)

FIG 6-1

5.4.7 FOCUS ON WAVEFORM



FOCUS_S

FACT+

FACT-

FIG 8-1 (DVD)

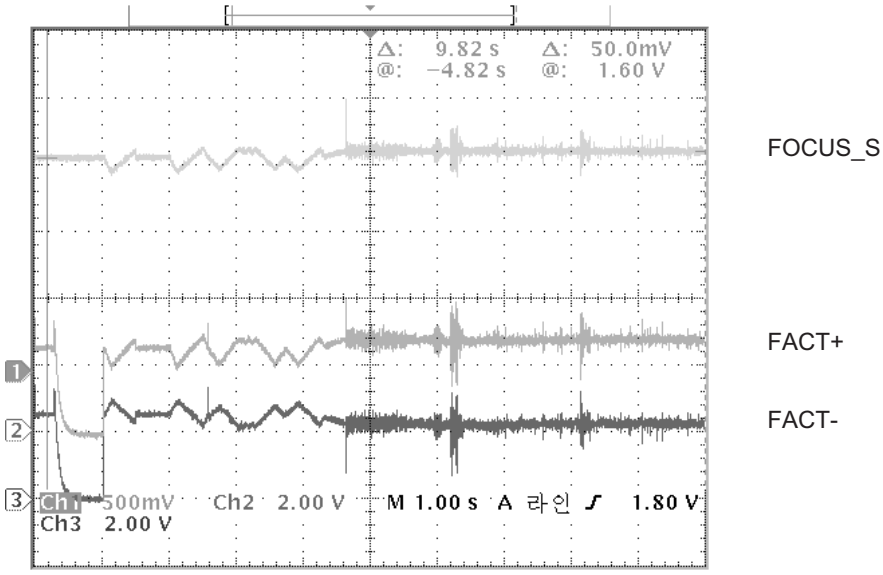


FIG 8-2 (CD)

5.4.8 SPINDLE CONTROL WAVEFORM (NO DISC CONDITION)

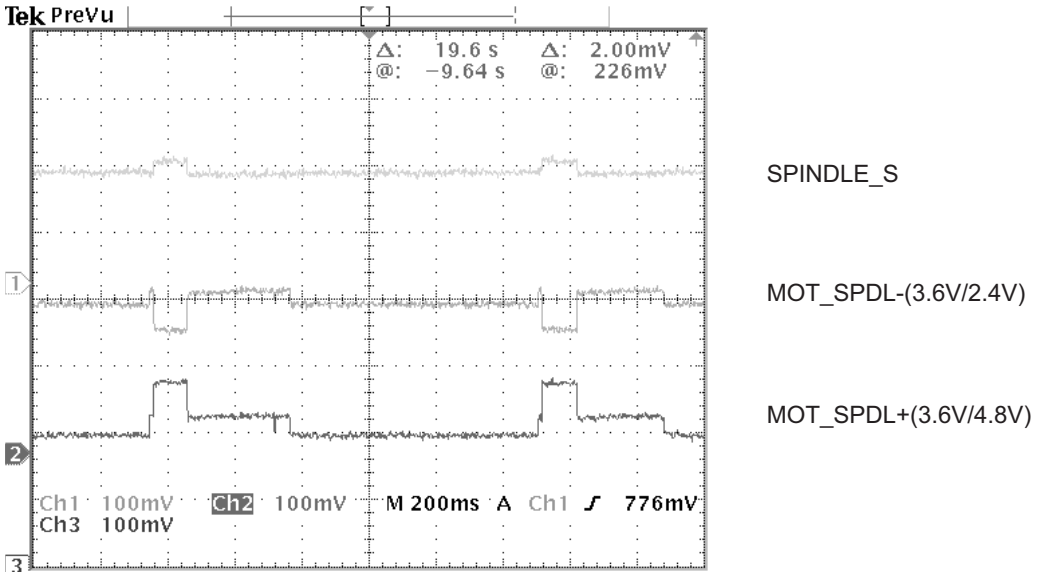
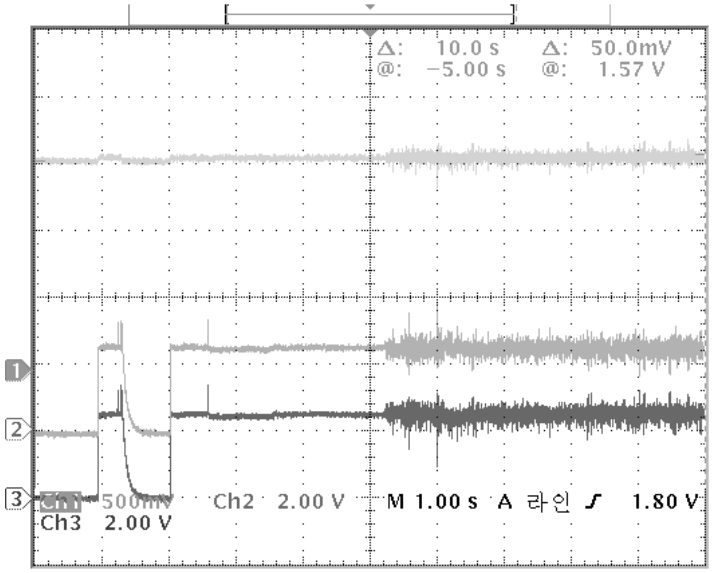


FIG 9-1

5.4.9 TRACKING CONTROL RELATED SIGNAL(System checking)

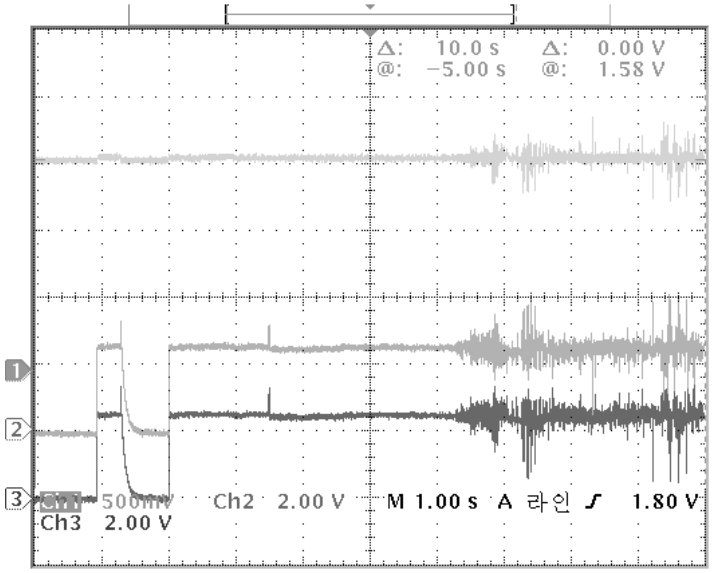


TRACK_S

TACT-

TACT+

FIG 10-1(DVD)



TRACK_S

TACT-

TACT+

FIG 10-2(CD)

5.4.10 ZR36868 AUDIO OPTICAL AND COAXIAL OUTPUT(SPDIF)

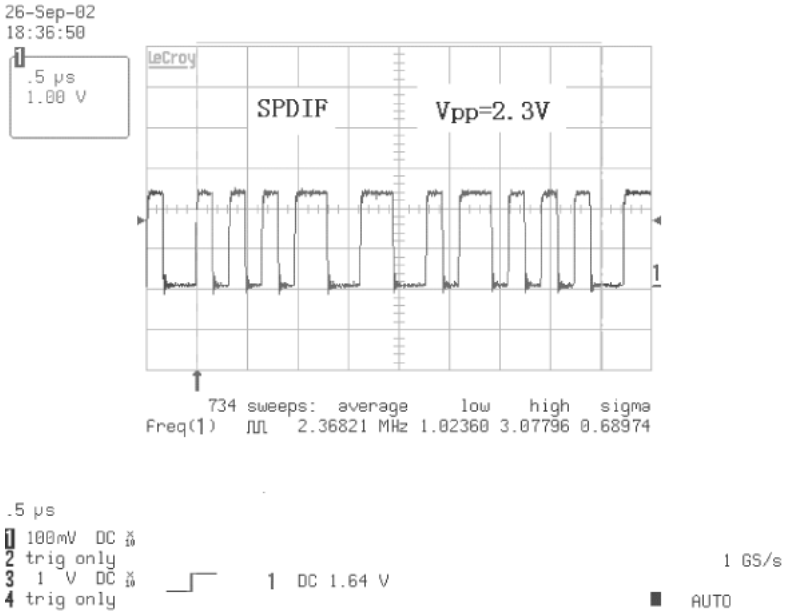


FIG 11-1

5.4.11 ZR36868 VIDEO OUTPUT WAVEFORM

1) 100%

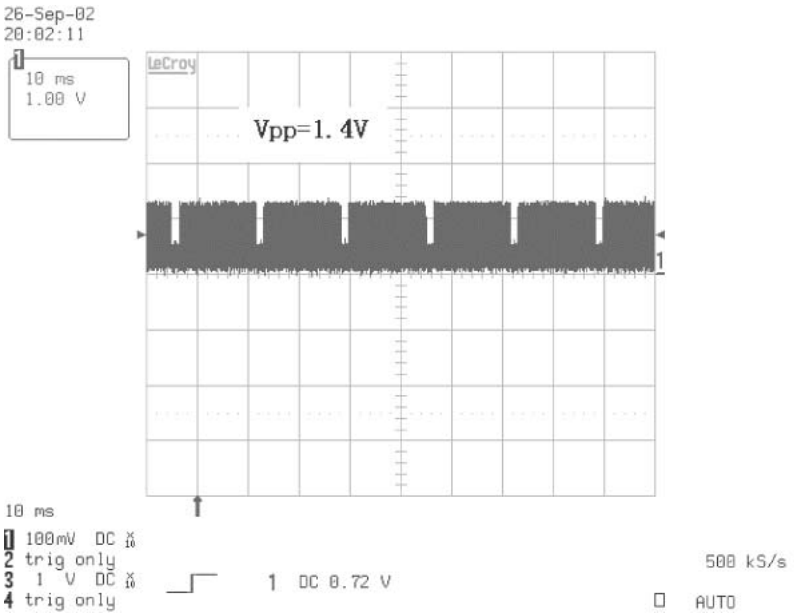


FIG 12-1

2) COMPOSITE VIDEO SIGNAL

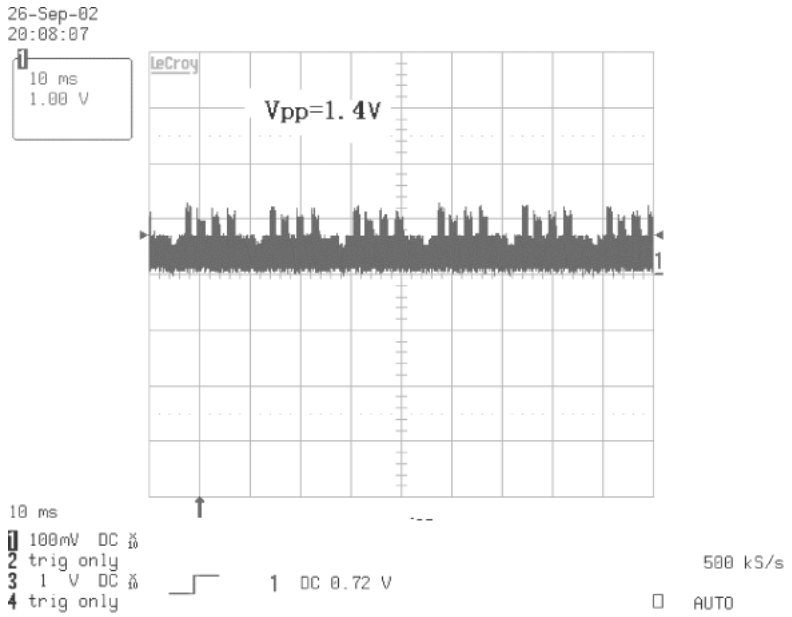


FIG 12-2

5.4.12 ZR36868 AUDIO OUTPUT TO AUDIO DAC

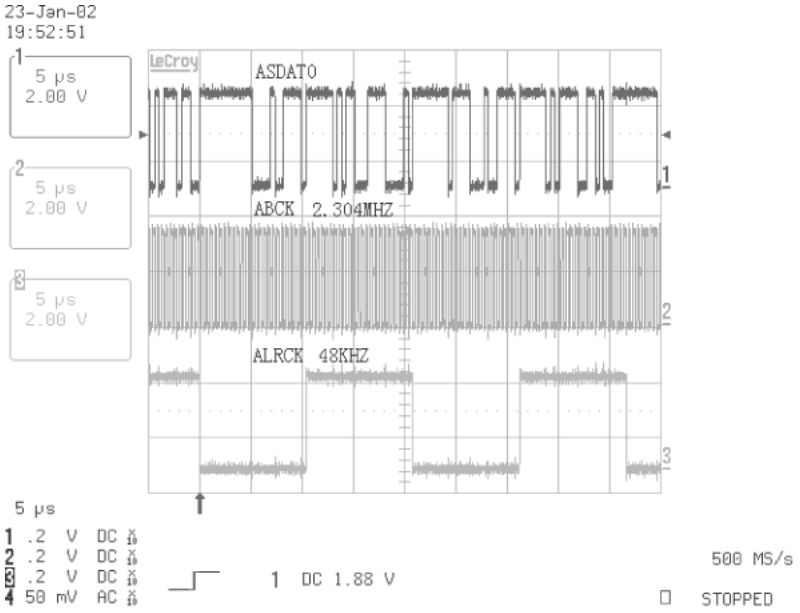


FIG 13-1

5.4.13 AUDIO OUTPUT FROM AUDIO DAC

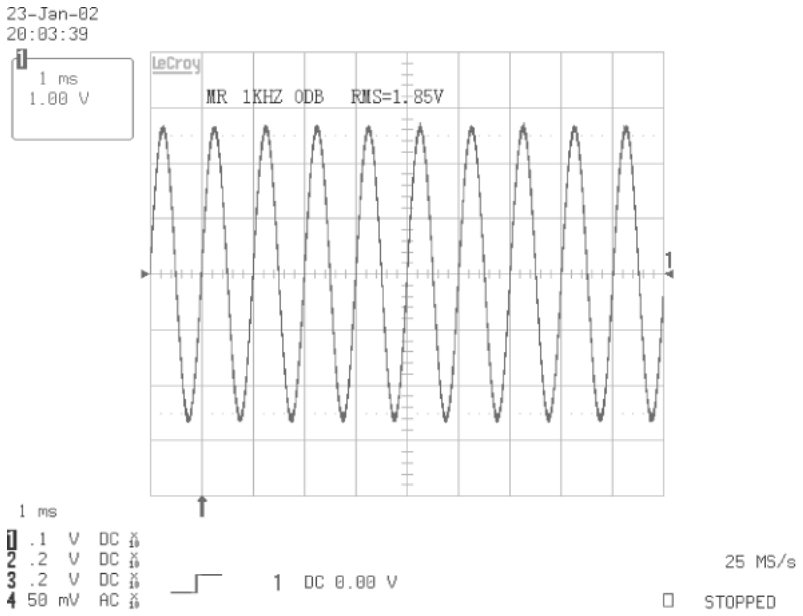


FIG 14-1

JVC
Victor Company of Japan, Limited
DIGITAL VIDEO STORAGE CATEGORY 12, 3-chome, Moriya-cho, kanagawa-ku, Yokohama, kanagawa-prefecture, 221-8528, Japan

(No.YD093)

Printed in Japan
VPT

JVC

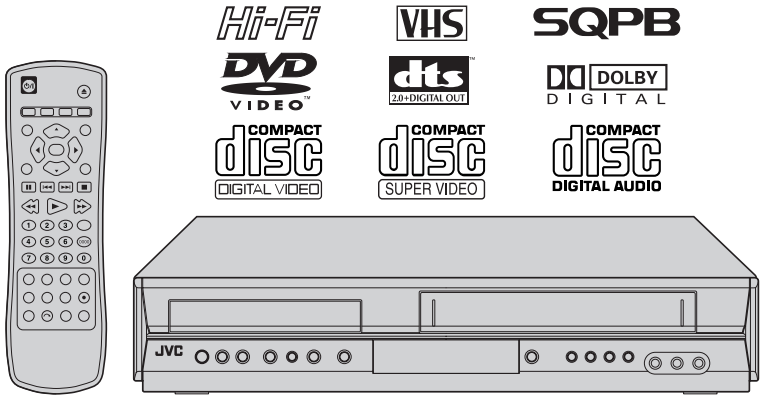
SCHEMATIC DIAGRAMS

DVD PLAYER & VIDEO CASSETTE RECORDER

HR-XVC16BUS, HR-XVC16BUC, HR-XVC17SUS, HR-XVC17SUC

CD-ROM No.SML200604

Area Suffix	
US	U.S.A.
UC	Canada



HR-XVC16BUS,HR-XVC16BUC,HR-XVC17SUS,HR-XVC17SUC [D6PV11]

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No.YD093SCH
2006/4

CHARTS AND DIAGRAMS

NOTES OF SCHEMATIC DIAGRAM

Safety precautions
The Components indentified by the symbol ⚠ are critical for safety. For continued safety, replace safety critical components only with manufacturer's recommended parts.

1. Units of components on the schematic diagram

Unless otherwise specified.

1) All resistance values are in ohm. 1/6 W, 1/8 W (refer to parts list).
   Chip resistors are 1/16 W.
   K: KΩ(1000Ω), M: MΩ (1000KΩ)
2) All capacitance values are in μF, (P: PF).
3) All inductance values are in μH, (m: mH).
4) All diodes are 1SS133, MA165 or 1N4148M (refer to parts list).

Note: The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

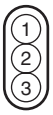
2. Indications of control voltage

AUX : Active at high.

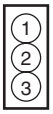
$\overline{\text{AUX}}$ or AUX(L) : Active at low.

3. Interpreting Connector indications

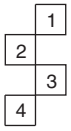
Removable connector



Wire soldered directly on board



Non-removable Board connector

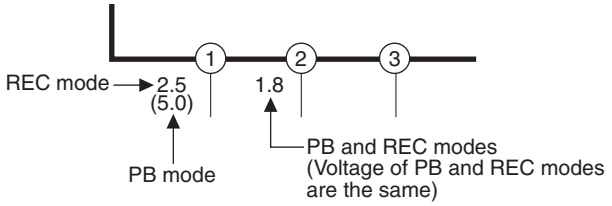


Board to Board

Connected pattern on board
The arrows indicate signal path

4. Voltage measurement

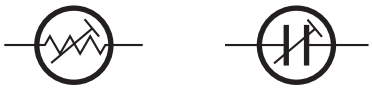
1) Regulator (DC/DC CONV) circuits
   REC : Colour bar signal.
   PB : Alignment tape (Colour bar).
   — : Unmeasurable or unnecessary to measure.
2) Indication on schematic diagram
   Voltage indications for REC and PB mode on the schematic diagram are as shown below.



Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.

6. Indication of the parts for adjustments

The parts for the adjustments are surrounded with the circle as shown below.



7. Indication of the parts not mounted on the circuit board

"OPEN" is indicated by the parts not mounted on the circuit board.

CIRCUIT BOARD NOTES

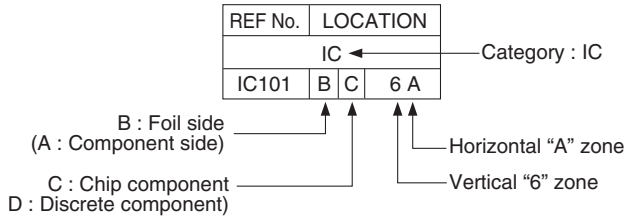
1. Foil and Component sides

1) Foil side (B side) :
   Parts on the foil side seen from foil face (pattern face) are indicated.
2) Component side (A side) :
   Parts on the component side seen from component face (parts face) indicated.

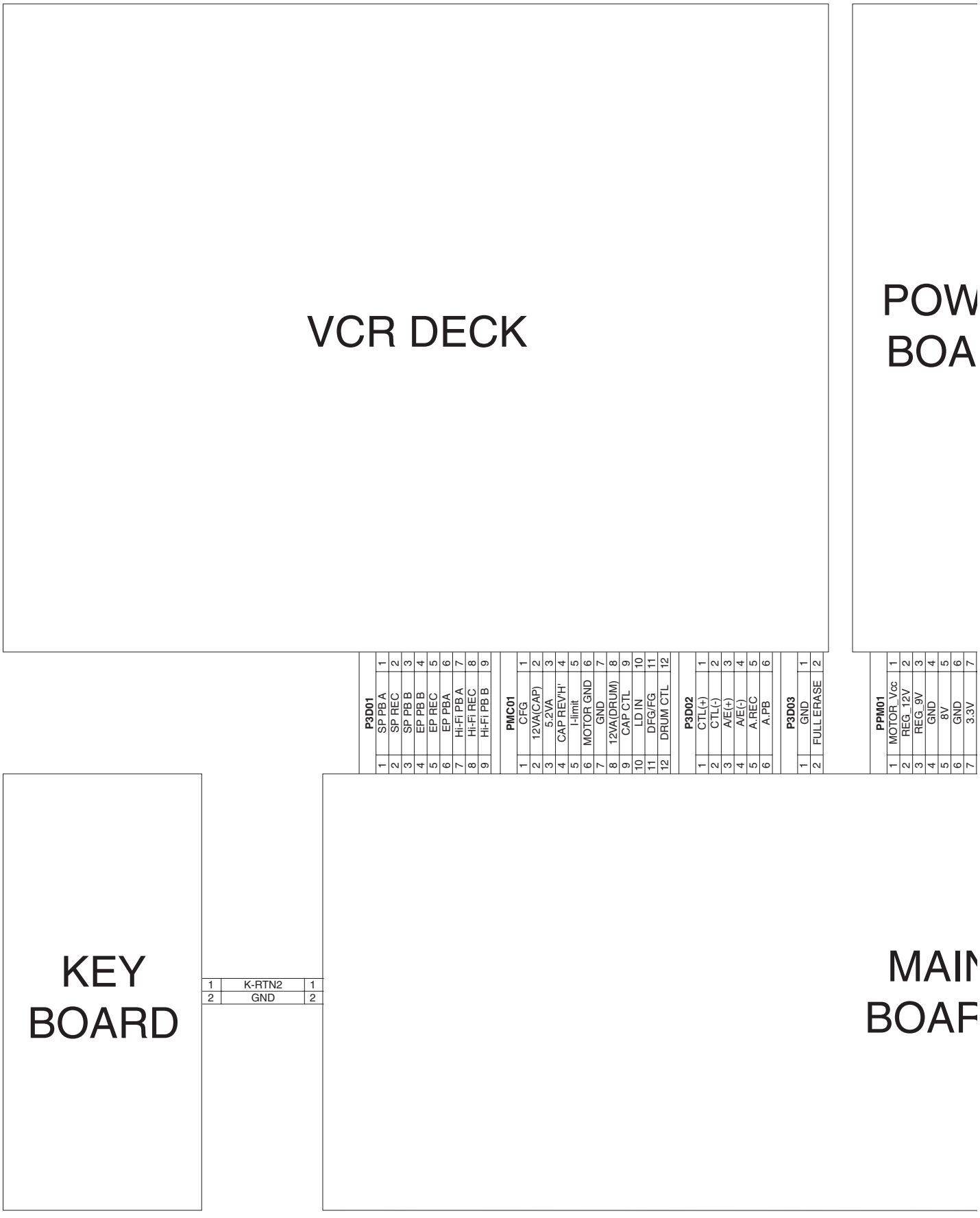
Parts location are indicated by guide scale on the circuit board.

2. Parts location guides

Parts location are indicated by guide scale on the circuit board.



Wiring diagram



POWER BOARD

DVD LOADER / DRIVE

MAIN BOARD

2	FULL ERASE

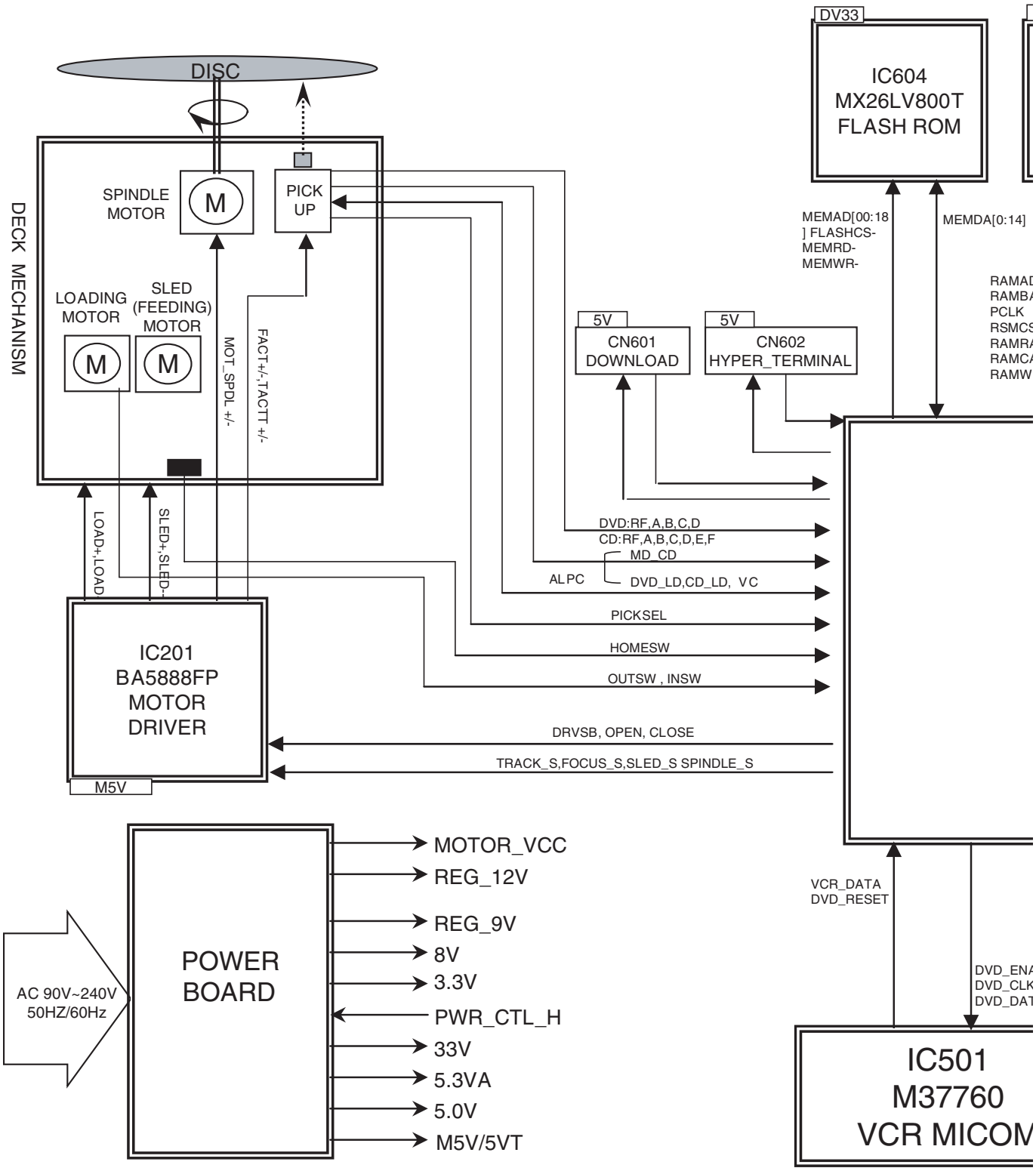
PPM01	
MOTOR_Vcc	1
REG_12V	2
REG_9V	3
GND	4
8V	5
GND	6
3.3V	7
PWR_CTL'H'	8
33V	9
GND	10
5.3VA	11
5V	12
M5V/5VT	13

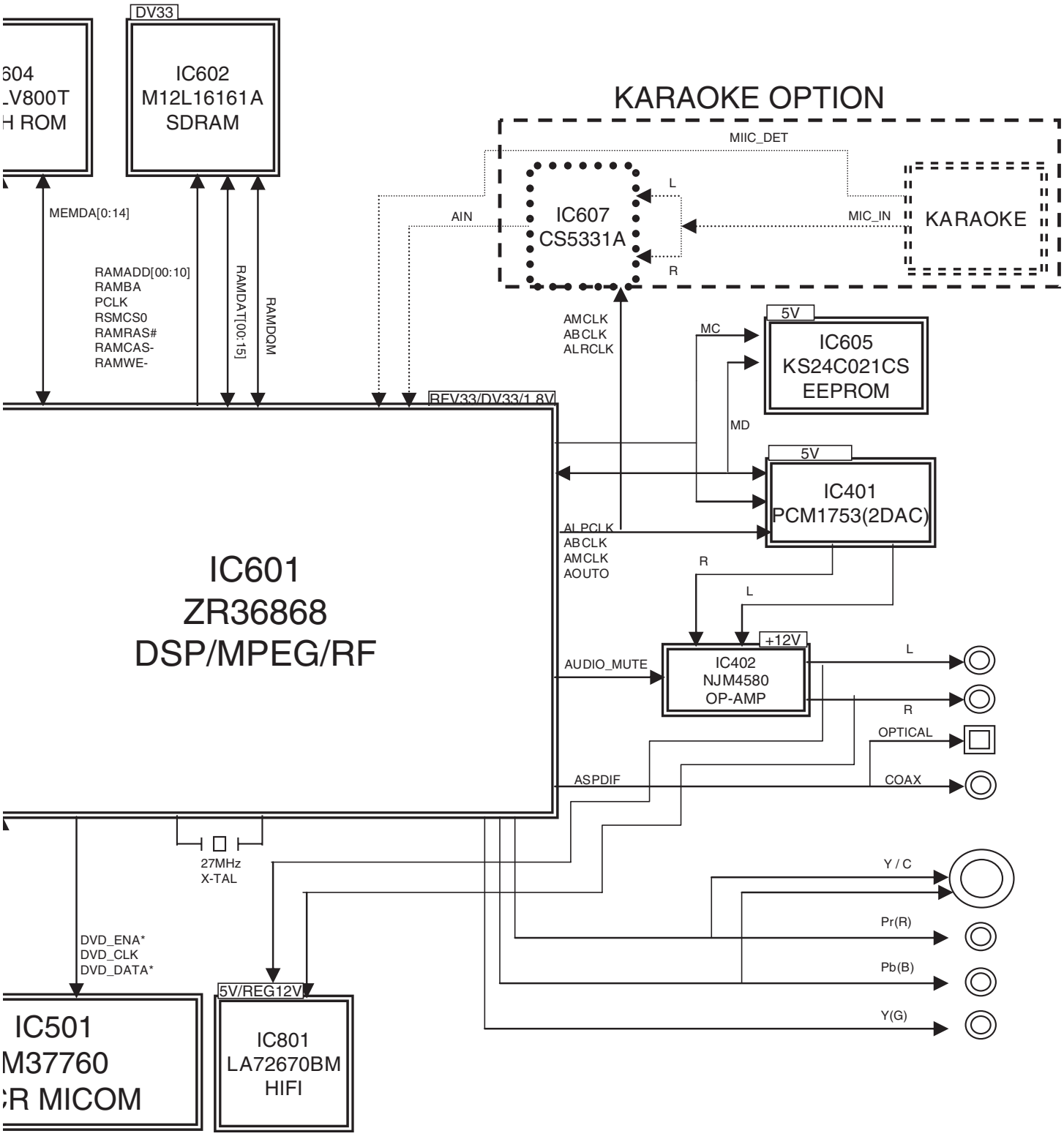
PMD01	PMD02
Vcc(HF)	1
RF	2
DVD_LD	3
DVD_PD	4
VOL(DVD)	5
GND	6
VC_INPUT	7
Vcc(HF)	8
F	9
E	10
A	11
D	12
C	13
B	14
F(+)	15
T(-)	16
T(+)	17
F(-)	18
Vcc	19
GND	20
CD_LD	21
CD_PD	22
VOL(CD)	23

PMD03	
SPM +	1
SPM -	2
FM +	3
FM -	4
LM -	5
LM +	6
SW(OPEN)	7
SW(CLOSE)	8
GND	9
SW(LEAD IN)	10
GND	11

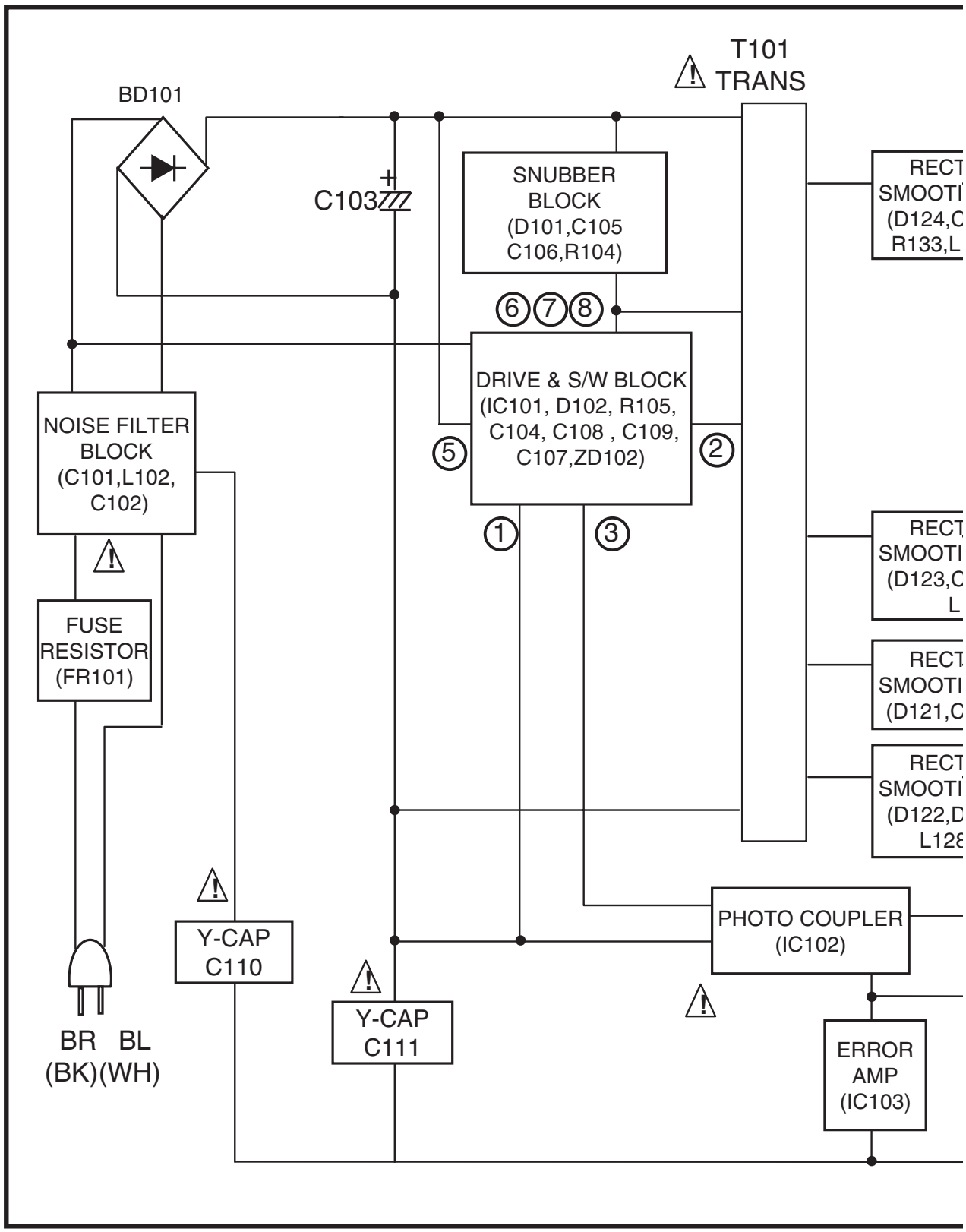
Block diagrams

■ Overall section

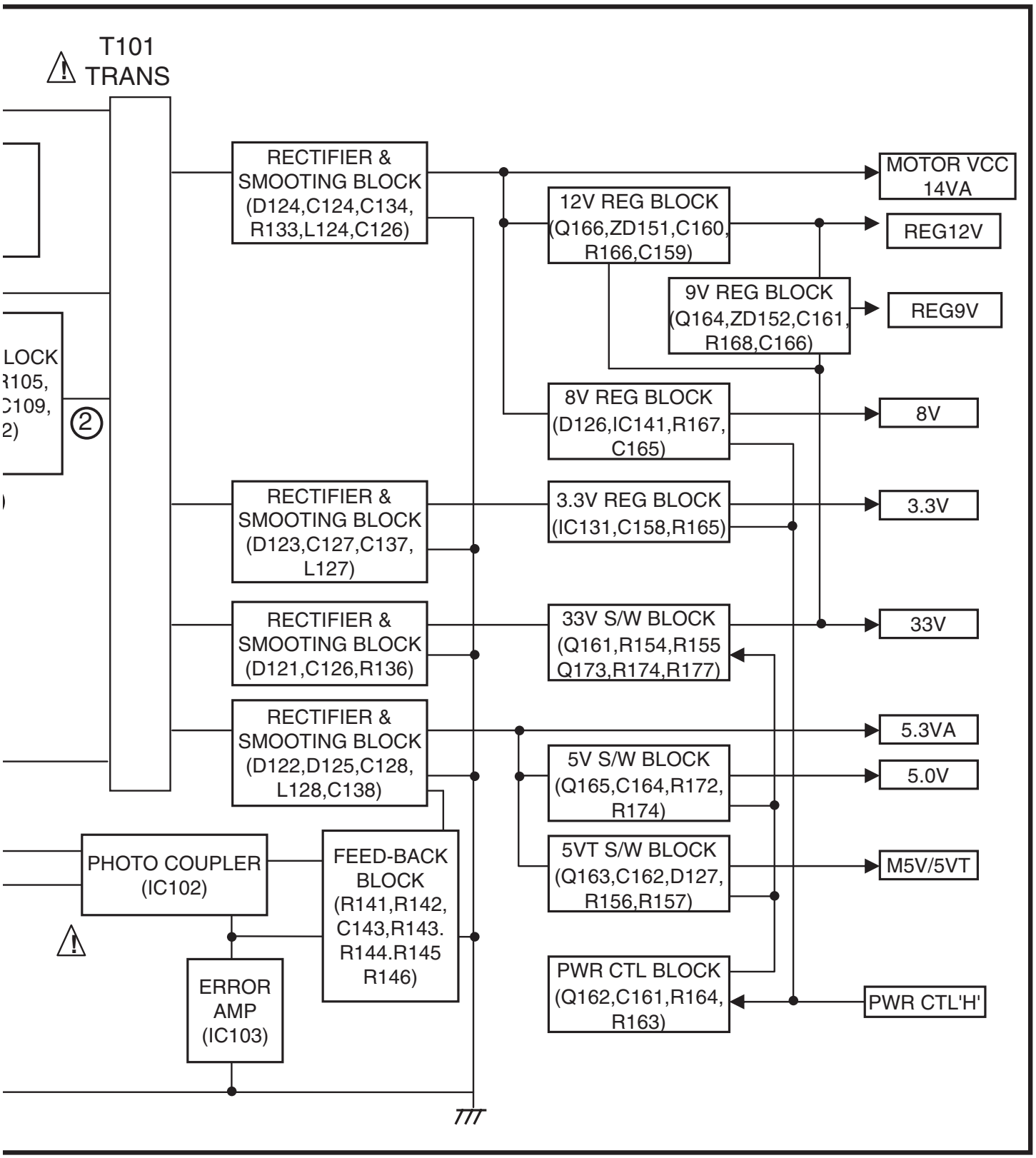



DV33
604
LV800T
H ROM
IC602
M12L16161A
SDRAM
KARAOKE OPTION
MIIC_DET
L
AIN
IC607
CS5331A
MIC_IN
KARAOKE
R
MEMDA[0:14]
RAMADD[00:10]
RAMBA
PCLK
RSMCS0
RAMRAS#
RAMCAS-
RAMWE-
RAMDAT[00:15]
RAMDQM
AMCLK
ABCLK
ALRCLK
5V
MC
IC605
KS24C021CS
EEPROM
MD
REV33/DV33/1.8V
5V
IC401
PCM1753(2DAC)
ALRCLK
ABCLK
AMCLK
AOUTO
R
L
IC601
ZR36868
DSP/MPEG/RF
+12V
AUDIO_MUTE
IC402
NJM4580
OP-AMP
L
R
OPTICAL
ASPDIF
COAX
27MHz
X-TAL
Y / C
Pr(R)
Pb(B)
Y(G)
DVD_ENA*
DVD_CLK
DVD_DATA*
5V/REG12V
IC501
M37760
CR MICOM
IC801
LA72670BM
HIFI

■ Power (SMPS) block section

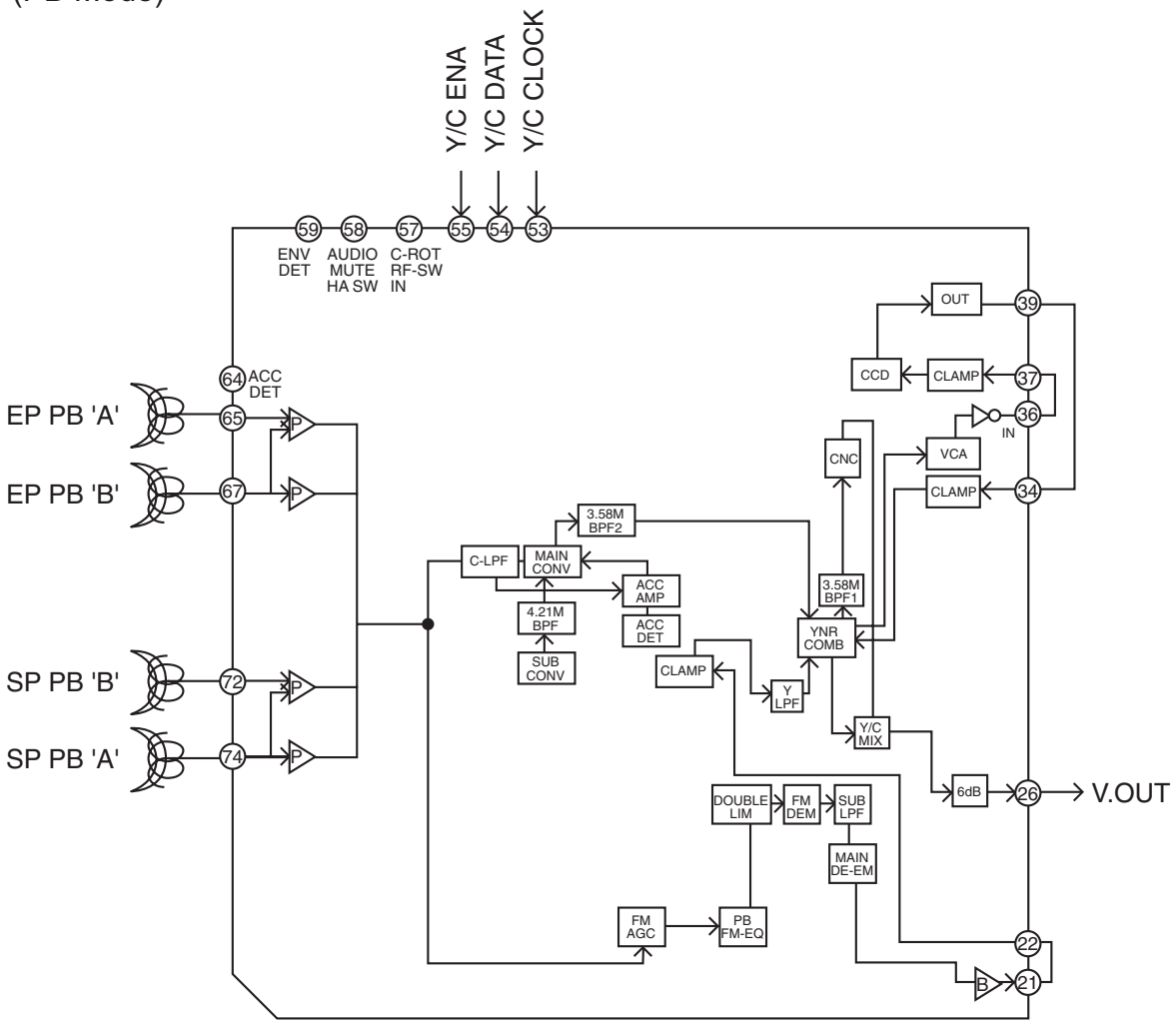


NOTES) ⚠ Warning
Parts that are shaded are critical
With respect to risk of fire or
electricial shock.

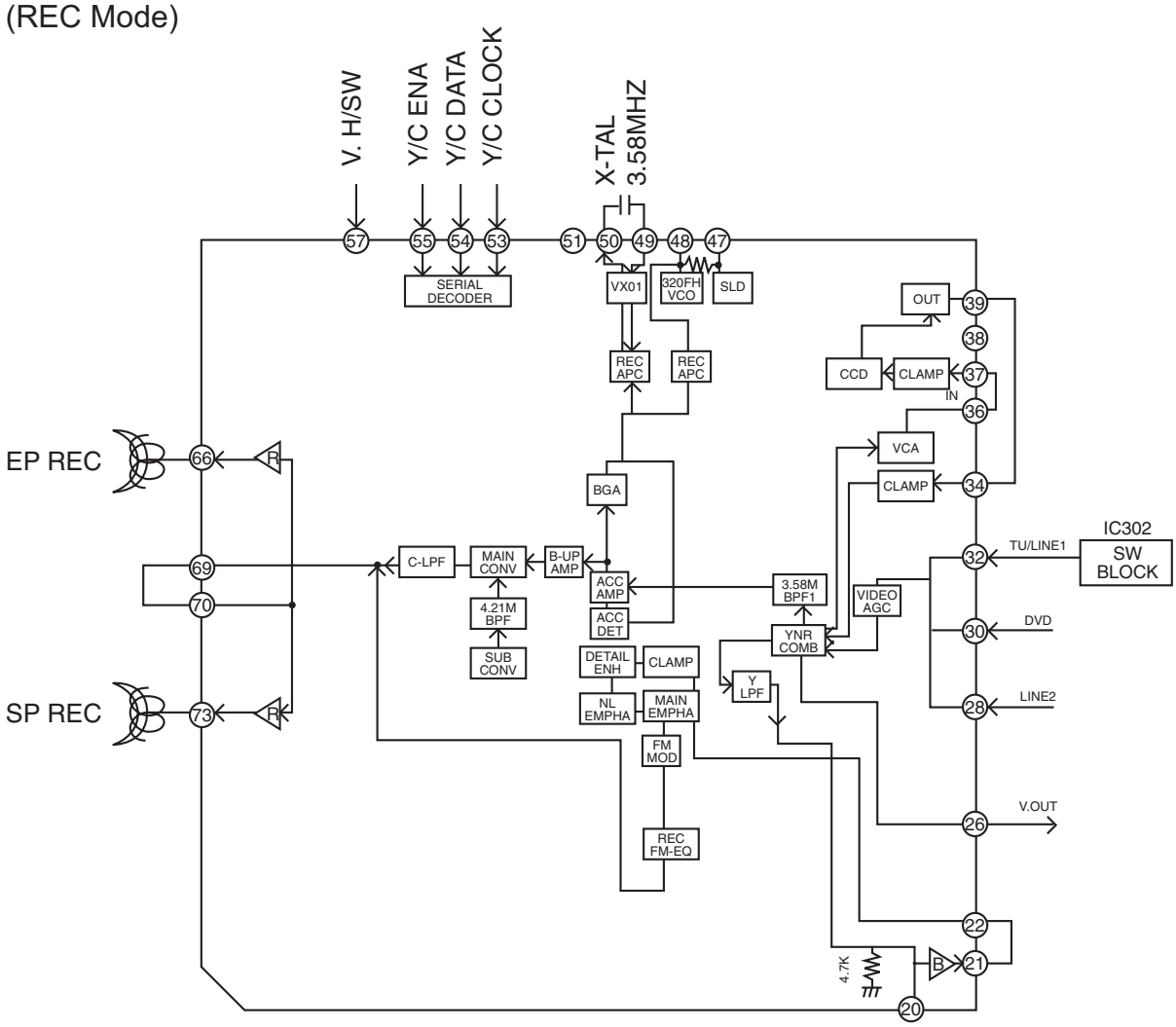

T101
TRANS
RECTIFIER & SMOOTING BLOCK (D124,C124,C134, R133,L124,C126)
12V REG BLOCK (Q166,ZD151,C160, R166,C159)
9V REG BLOCK (Q164,ZD152,C161, R168,C166)
8V REG BLOCK (D126,IC141,R167, C165)
RECTIFIER & SMOOTING BLOCK (D123,C127,C137, L127)
3.3V REG BLOCK (IC131,C158,R165)
RECTIFIER & SMOOTING BLOCK (D121,C126,R136)
33V S/W BLOCK (Q161,R154,R155 Q173,R174,R177)
RECTIFIER & SMOOTING BLOCK (D122,D125,C128, L128,C138)
5V S/W BLOCK (Q165,C164,R172, R174)
5VT S/W BLOCK (Q163,C162,D127, R156,R157)
PWR CTL BLOCK (Q162,C161,R164, R163)
PHOTO COUPLER (IC102)
FEED-BACK BLOCK (R141,R142, C143,R143. R144.R145 R146)
ERROR AMP (IC103)
MOTOR VCC 14VA
REG12V
REG9V
8V
3.3V
33V
5.3VA
5.0V
M5V/5VT
PWR CTL'H'
LOCK
R105,
C109,
2)
2

■ Y/C Block section

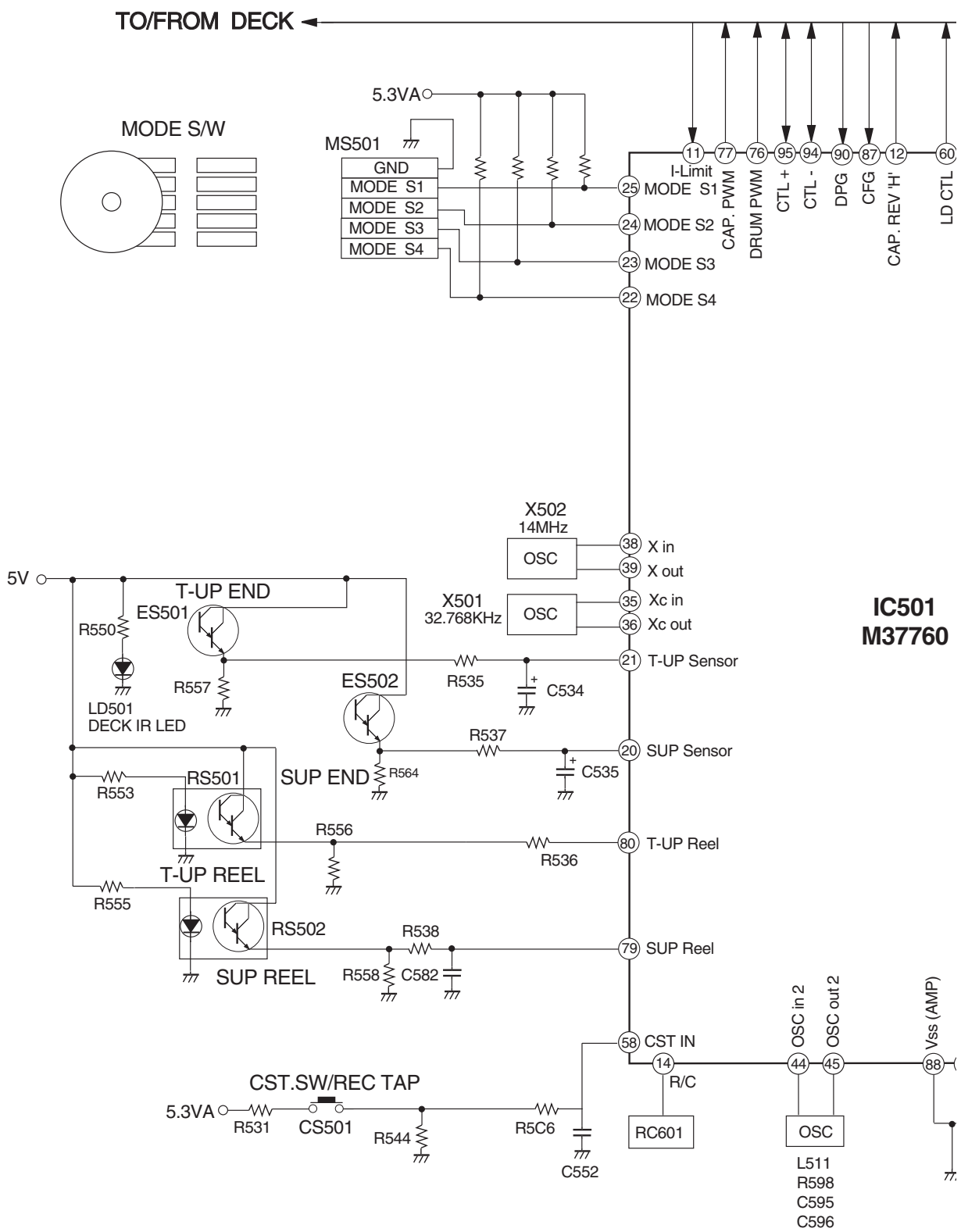
(PB Mode)

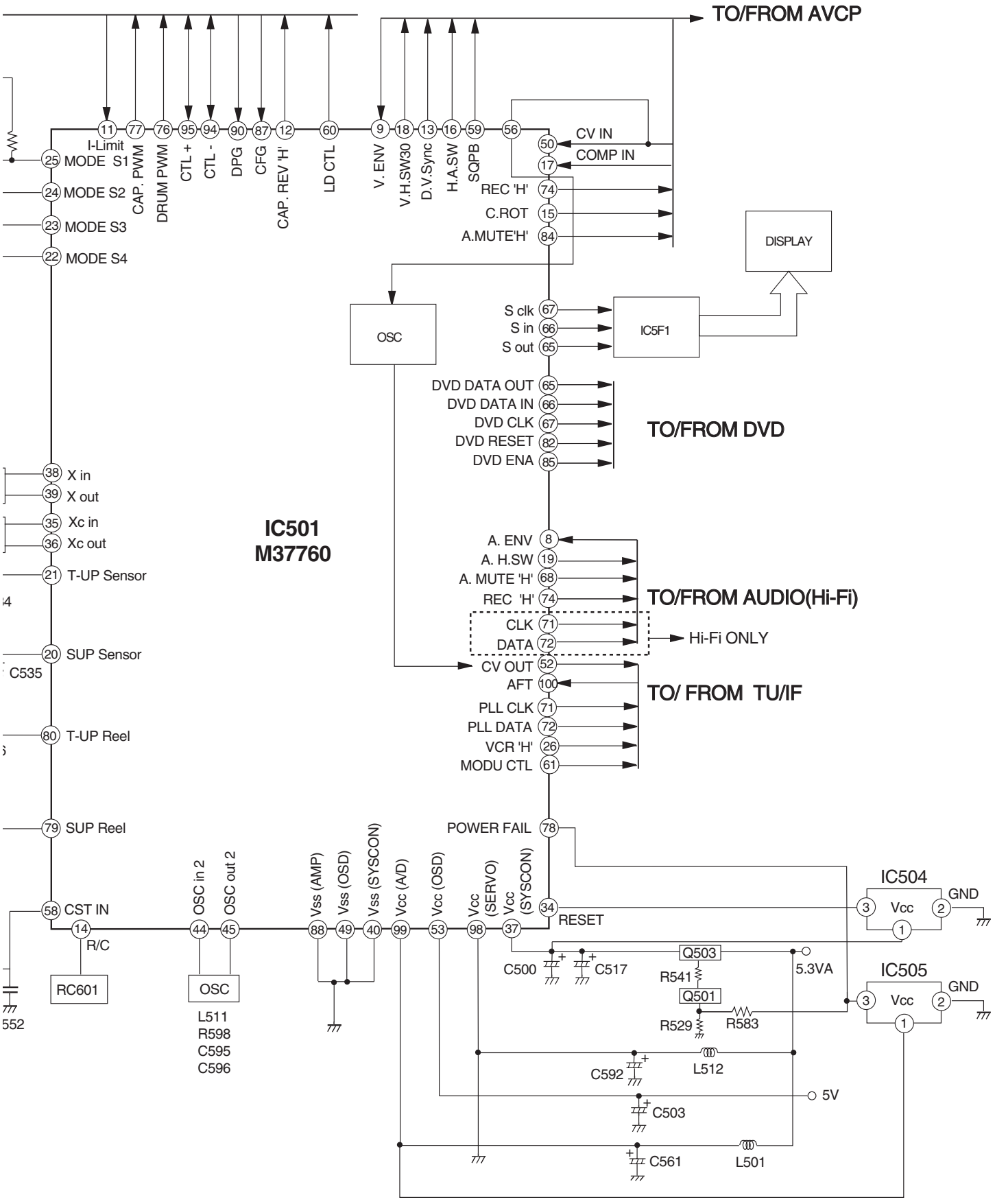


(REC Mode)

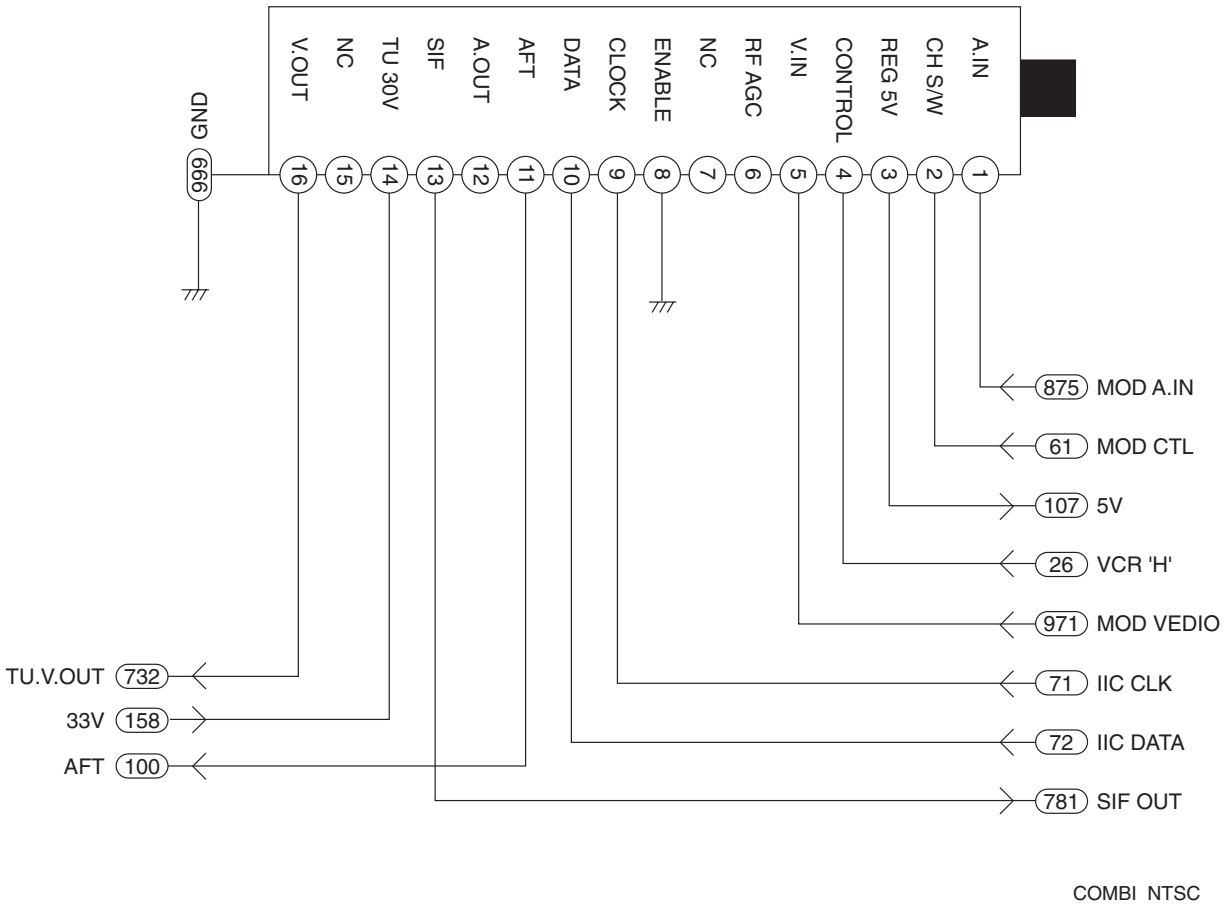

V. H/SW
Y/C ENA
Y/C DATA
Y/C CLOCK
X-TAL
3.58MHZ
57
55
54
53
51
50
49
48
47
SERIAL DECODER
VX01
320FH VCO
SLD
REC APC
REC APC
OUT
39
38
CCD
CLAMP
37
IN
36
VCA
CLAMP
34
EP REC
66
R
BGA
IC302
SW BLOCK
TU/LINE1
32
69
C-LPF
MAIN CONV
B-UP AMP
ACC AMP
3.58M BPF1
VIDEO AGC
70
4.21M BPF
ACC DET
DVD
30
YNR COMB
DETAIL ENH
CLAMP
Y LPF
SUB CONV
SP REC
73
R
NL EMPHA
MAIN EMPHA
LINE2
28
FM MOD
V.OUT
26
REC FM-EQ
22
4.7K
B
21
20

■ System block section



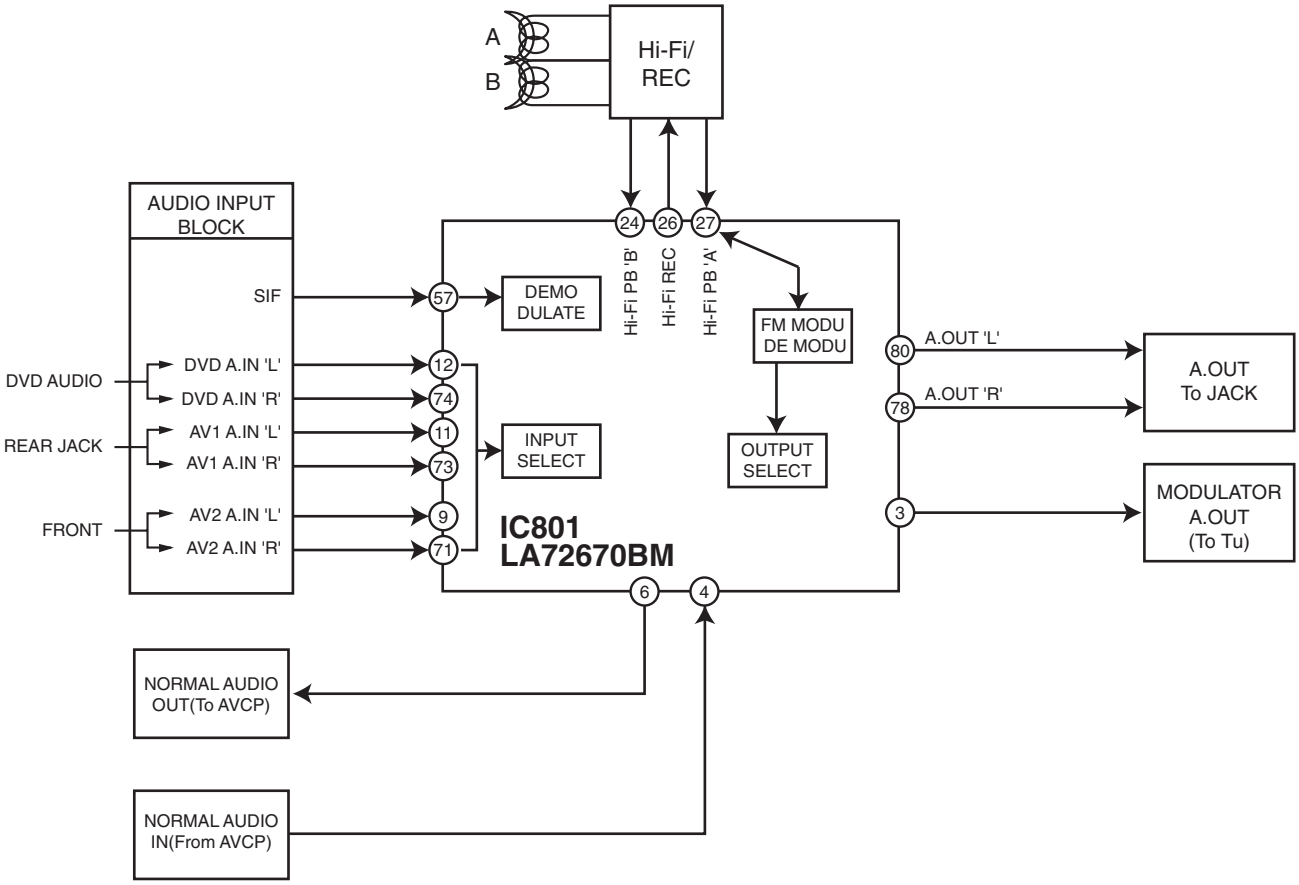

TO/FROM AVCP
I-Limit
CAP. PWM
DRUM PWM
CTL +
CTL -
DPG
CFG
CAP. REV 'H'
LD CTL
V. ENV
V.H.SW30
D.V.Sync
H.A.SW
SQPB
CV IN
COMP IN
REC 'H'
C.ROT
A.MUTE'H'
MODE S1
MODE S2
MODE S3
MODE S4
DISPLAY
OSC
S clk
S in
S out
IC5F1
DVD DATA OUT
DVD DATA IN
DVD CLK
DVD RESET
DVD ENA
TO/FROM DVD
X in
X out
Xc in
Xc out
T-UP Sensor
SUP Sensor
T-UP Reel
SUP Reel
IC501
M37760
A. ENV
A. H.SW
A. MUTE 'H'
REC 'H'
CLK
DATA
Hi-Fi ONLY
TO/FROM AUDIO(Hi-Fi)
CV OUT
AFT
PLL CLK
PLL DATA
VCR 'H'
MODU CTL
TO/ FROM TU/IF
POWER FAIL
CST IN
R/C
RC601
OSC in 2
OSC out 2
OSC
L511
R598
C595
C596
Vss (AMP)
Vss (OSD)
Vss (SYSCON)
Vcc (A/D)
Vcc (OSD)
Vcc (SERVO)
Vcc (SYSCON)
RESET
IC504
IC505
GND
Vcc
C500
C517
Q503
R541
Q501
R529
R583
5.3VA
C592
L512
5V
C503
C561
L501
C535
C552

■ Tuner/IF block section

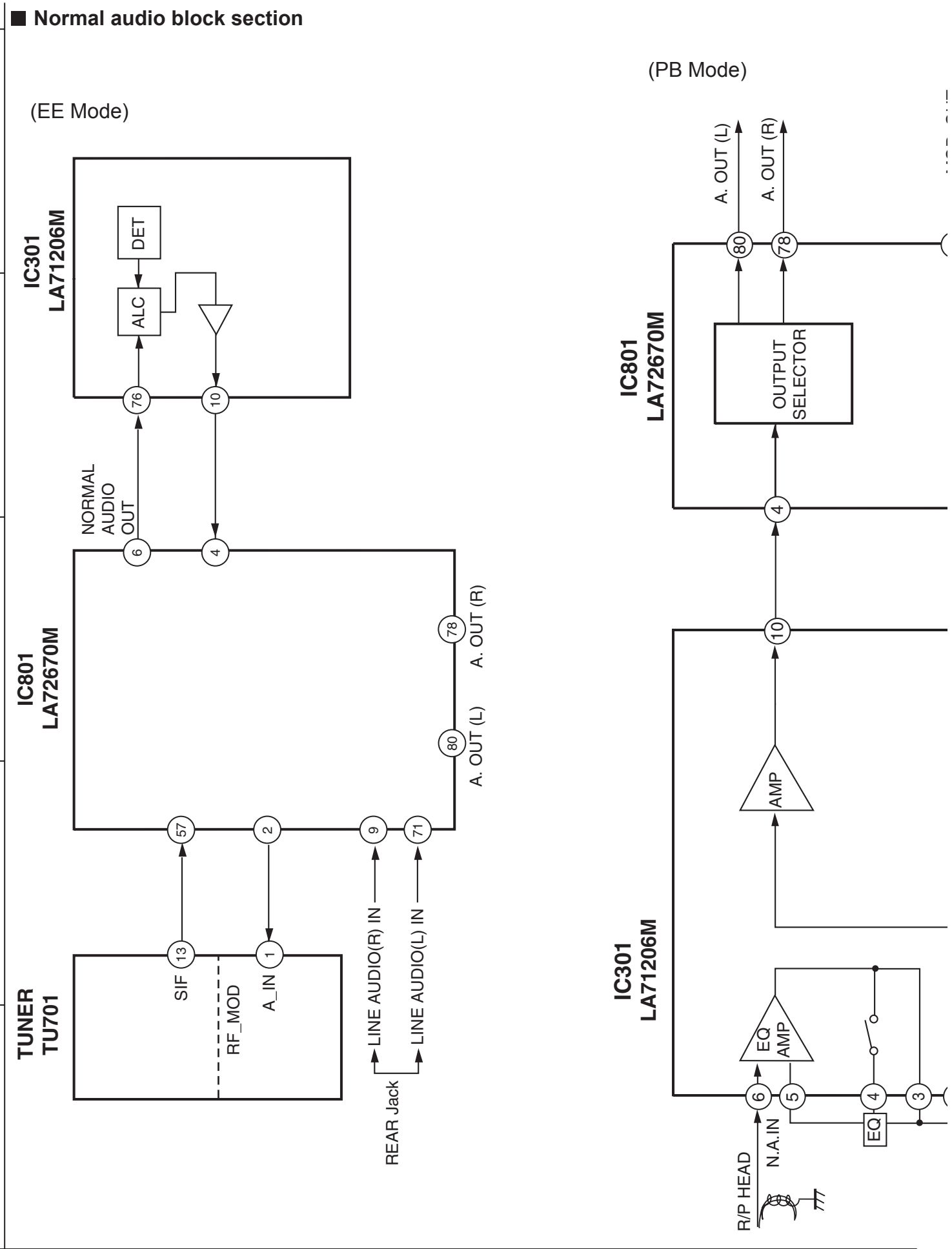


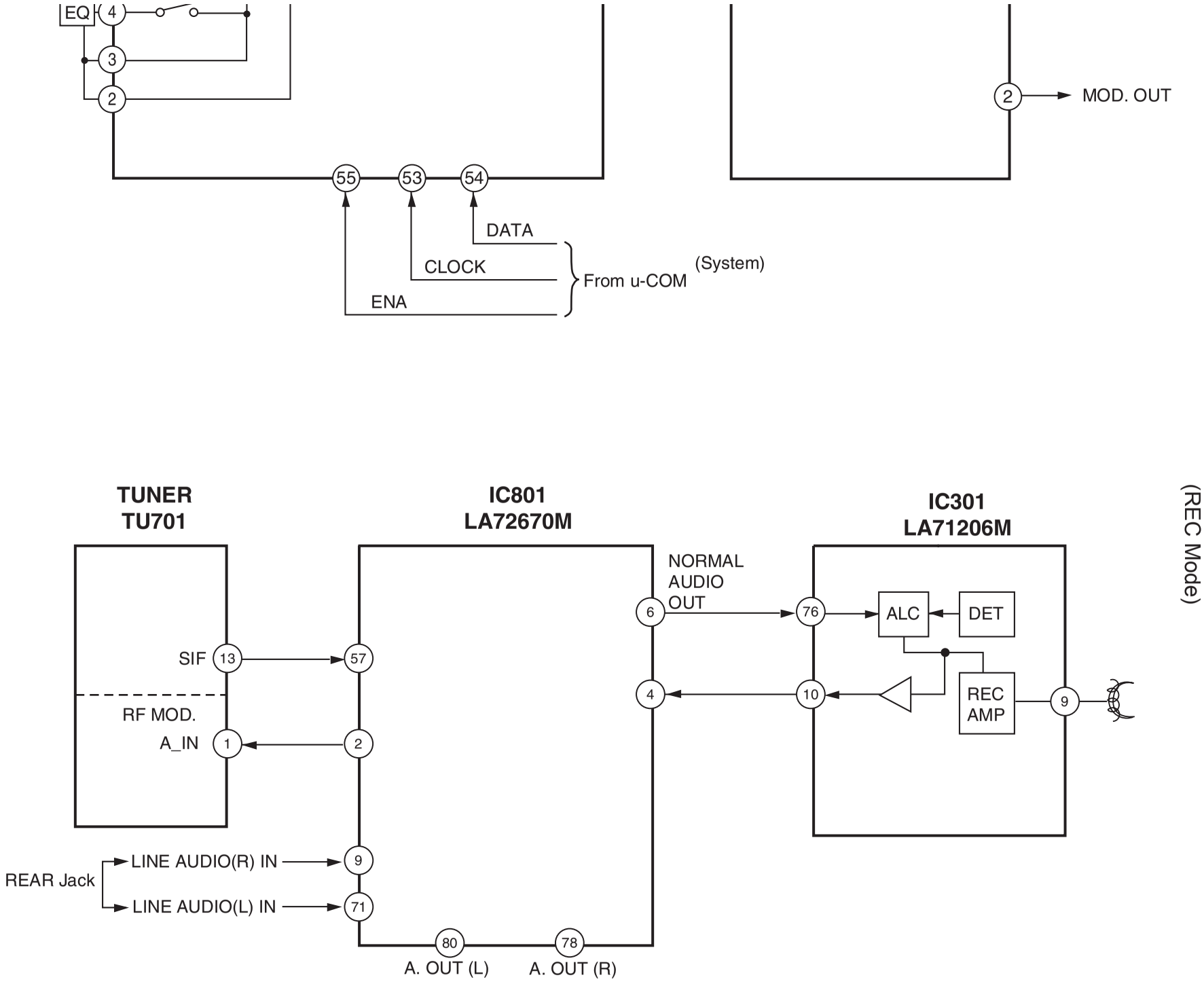
COMBI NTSC

■ Hi-Fi block section

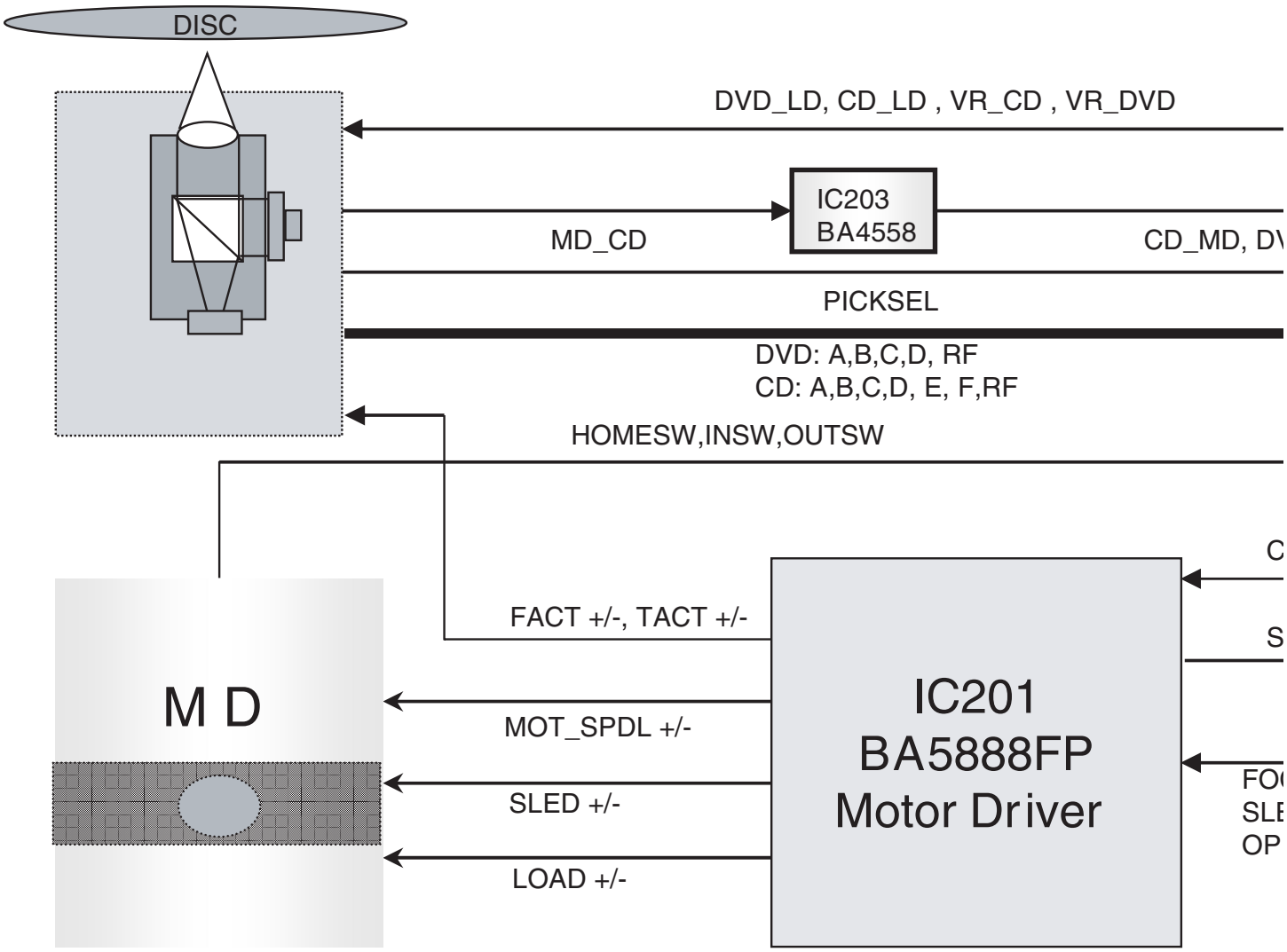


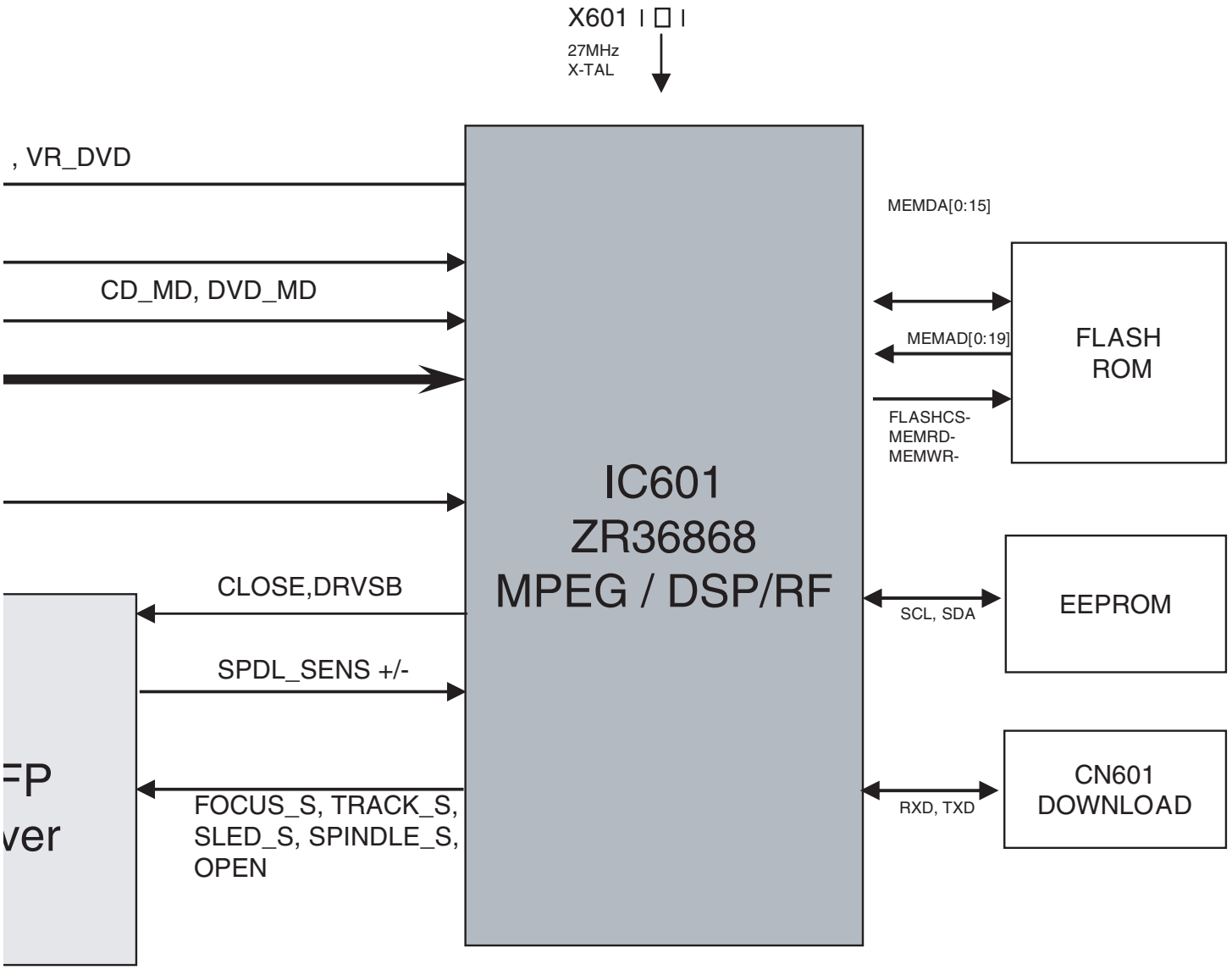
■ Normal audio block section



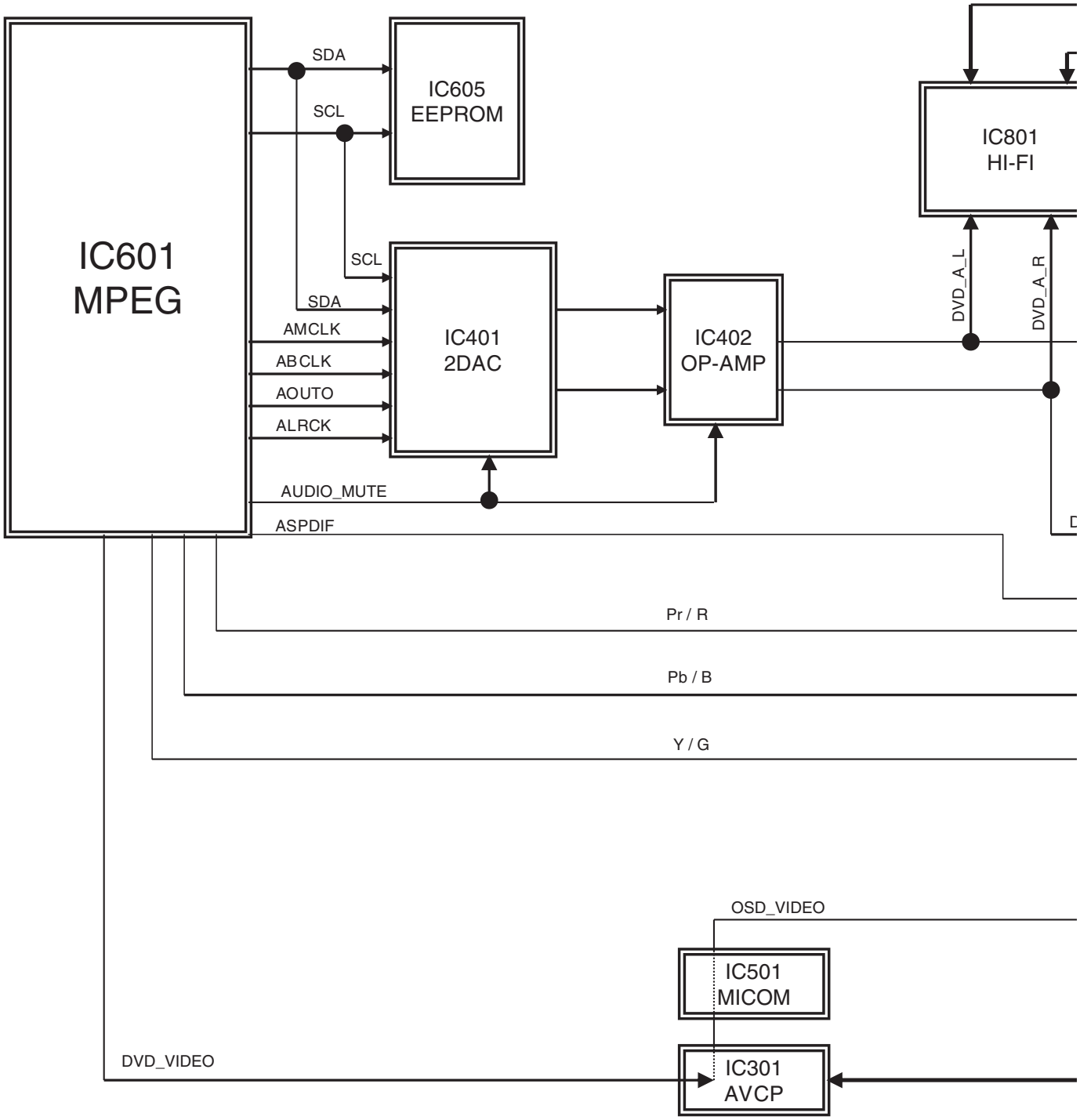

EQ
4
3
2
55
53
54
DATA
CLOCK
ENA
From u-COM
(System)
2
MOD. OUT
TUNER
TU701
IC801
LA72670M
IC301
LA71206M
(REC Mode)
NORMAL
AUDIO
OUT
6
76
ALC
DET
SIF
13
57
RF MOD.
A_IN
1
2
4
10
REC
AMP
9
REAR Jack
LINE AUDIO(R) IN
LINE AUDIO(L) IN
9
71
80
78
A. OUT (L)
A. OUT (R)

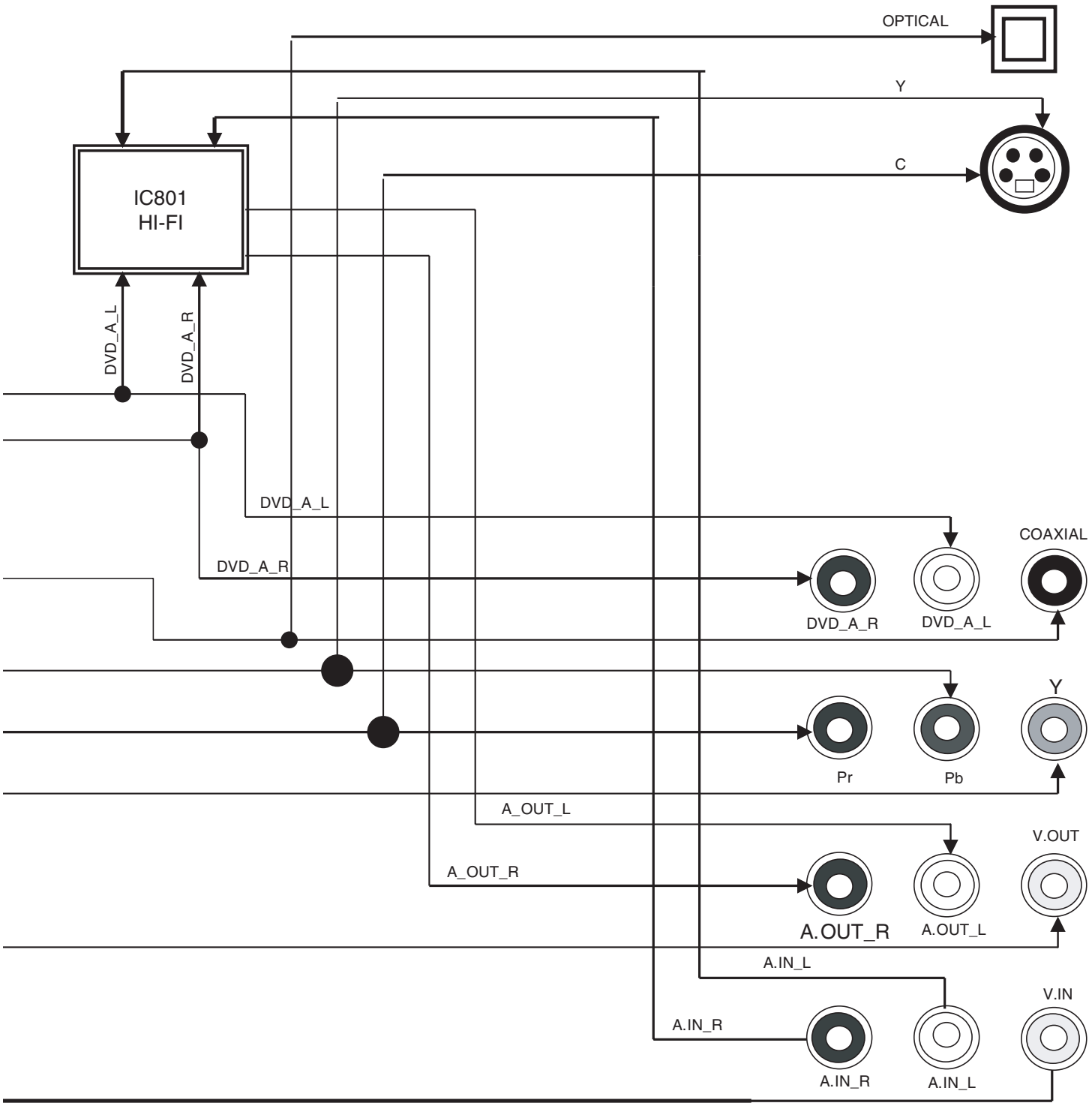
■ DVD Servo block section




X601
27MHz
X-TAL
, VR_DVD
CD_MD, DVD_MD
CLOSE,DRVSB
SPDL_SENS +/-
FOCUS_S, TRACK_S,
SLED_S, SPINDLE_S,
OPEN
IC601
ZR36868
MPEG / DSP/RF
MEMDA[0:15]
MEMAD[0:19]
FLASHCS-
MEMRD-
MEMWR-
FLASH
ROM
SCL, SDA
EEPROM
RXD, TXD
CN601
DOWNLOAD

■ DVD Video & Audio block section




OPTICAL
Y
C
IC801
HI-FI
DVD_A_L
DVD_A_R
DVD_A_L
DVD_A_R
COAXIAL
DVD_A_R
DVD_A_L
Y
Pr
Pb
A_OUT_L
A_OUT_R
V.OUT
A.OUT_R
A.OUT_L
A.IN_L
A.IN_R
V.IN
A.IN_R
A.IN_L

Standard schematic diagrams

■ Power (SMPS) section

IMPORTANT SAFETY NOTICE

WHEN SERVICING THIS CHASSIS, UNDER NO CIRCUMSTANCES SHOULD THE ORIGINAL DESIGN BE MODIFIED OR ALTERED WITHOUT PERMISSION FROM THE JVC ELECTRONICS CORPORATION. ALL COMPONENTS SHOULD BE REPLACED ONLY WITH TYPES IDENTICAL TO THOSE IN THE ORIGINAL CIR-

CUIT. S
SCHEM
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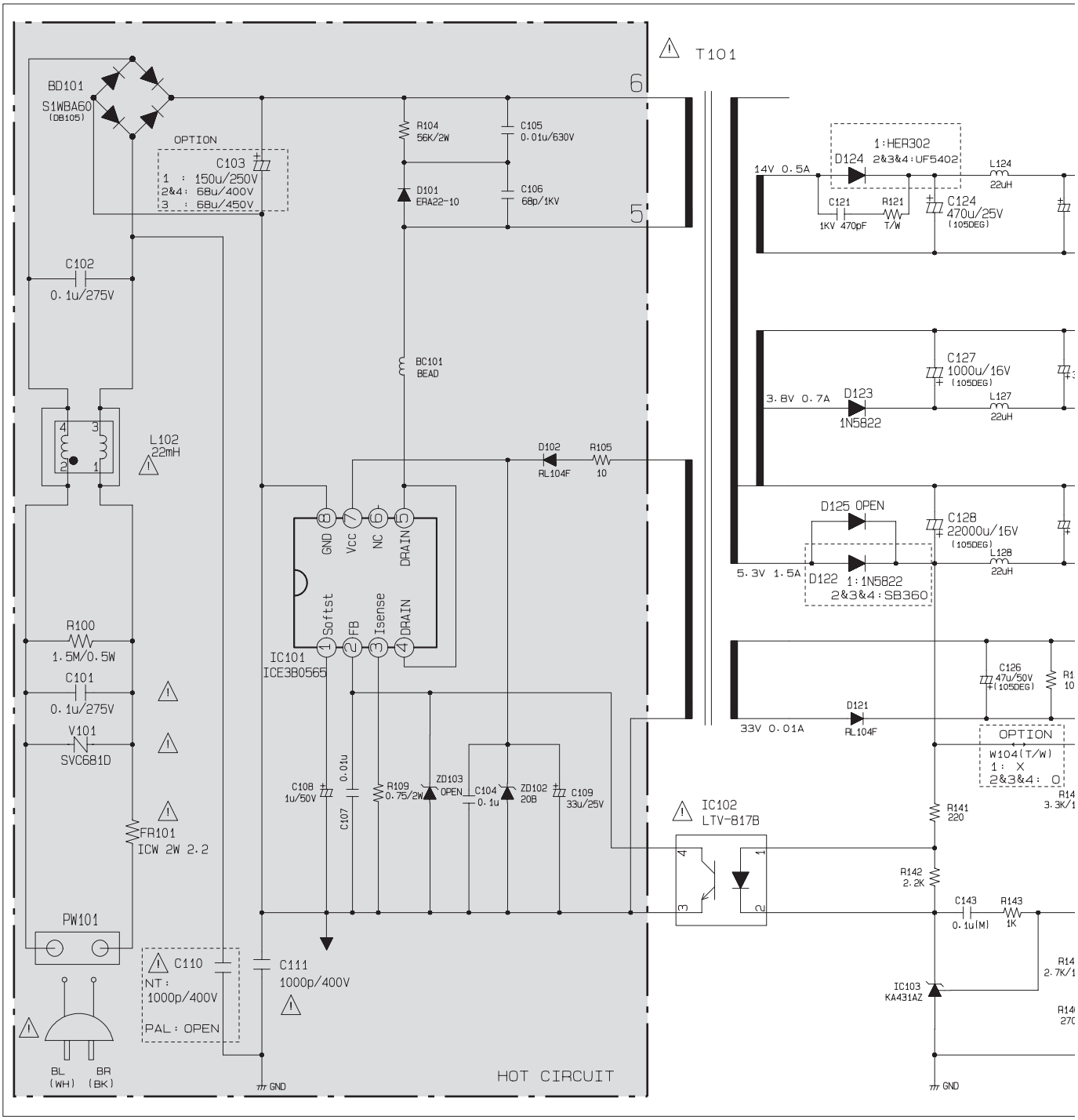
IMPLEI
PERFO
THE SE
LITERA



NOTES) ⏚ Symbol denotes AC ground.
⏚ Symbol denotes DC chassis ground.

NOTE) ⚠ Warning
Parts that are shaded are critical With respect to risk of fire or electricial shock.

*OPTION TABLE
1:NORTH AMERICA
2:EUROPE
3:CIS: SOUTH AMERICA
4:KOREA

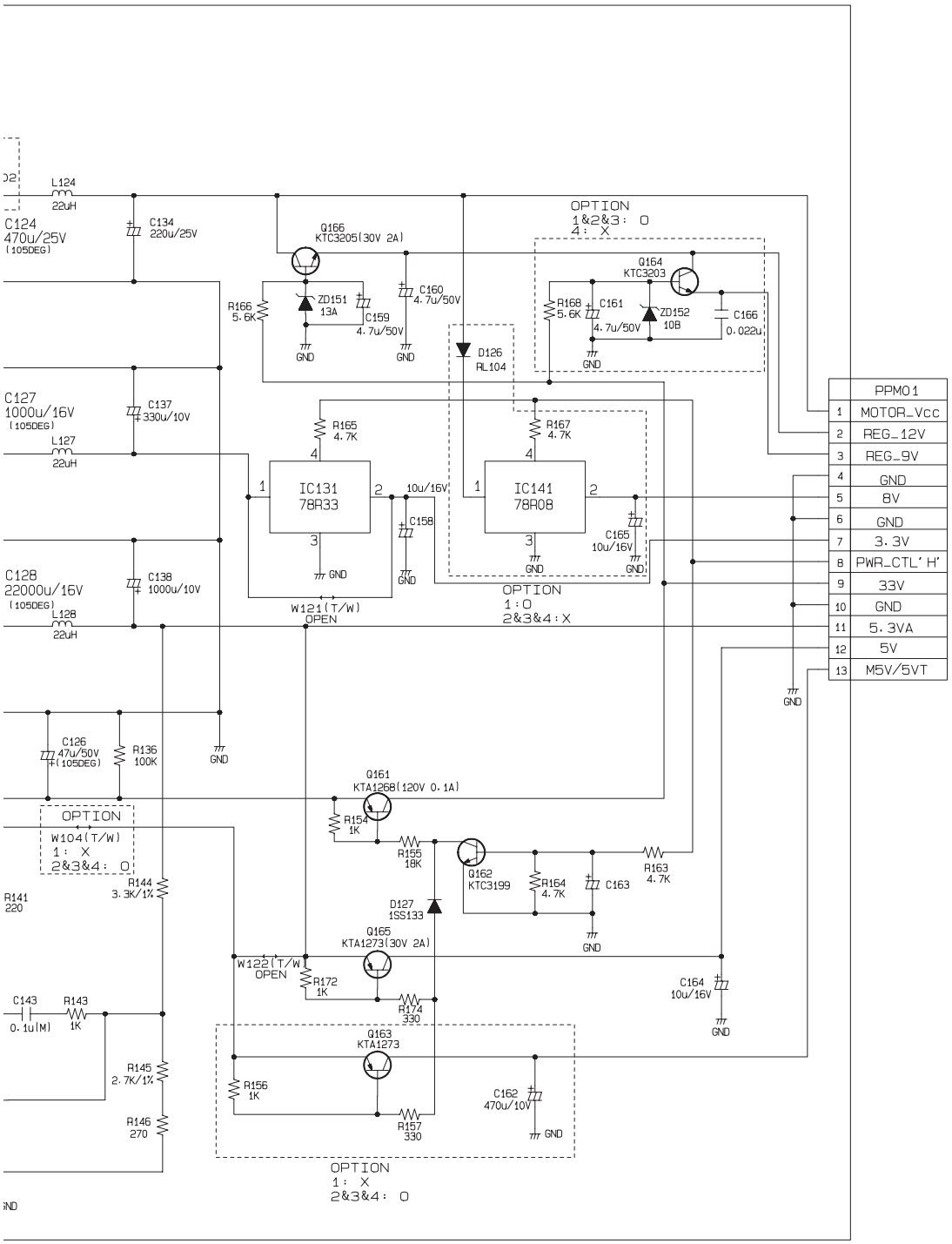
ER NO CIR-
DESIGN BE
ERMISSION
ATION. ALL
ONLY WITH
IGINAL CIR-

CUIT. SPECIAL COMPONENTS ARE SHADED ON THE SCHEMATIC FOR EASY IDENTIFICATION.

THIS CIRCUIT DIAGRAM MAY OCCASIONALLY DIFFER FROM THE ACTUAL CIRCUIT USED. THIS WAY, IMPLEMENTATION OF THE LATEST SAFETY AND PERFORMANCE IMPROVEMENT CHANGES INTO THE SET IS NOT DELAYED UNTIL THE NEW SERVICE LITERATURE IS PRINTED.

NOTE :

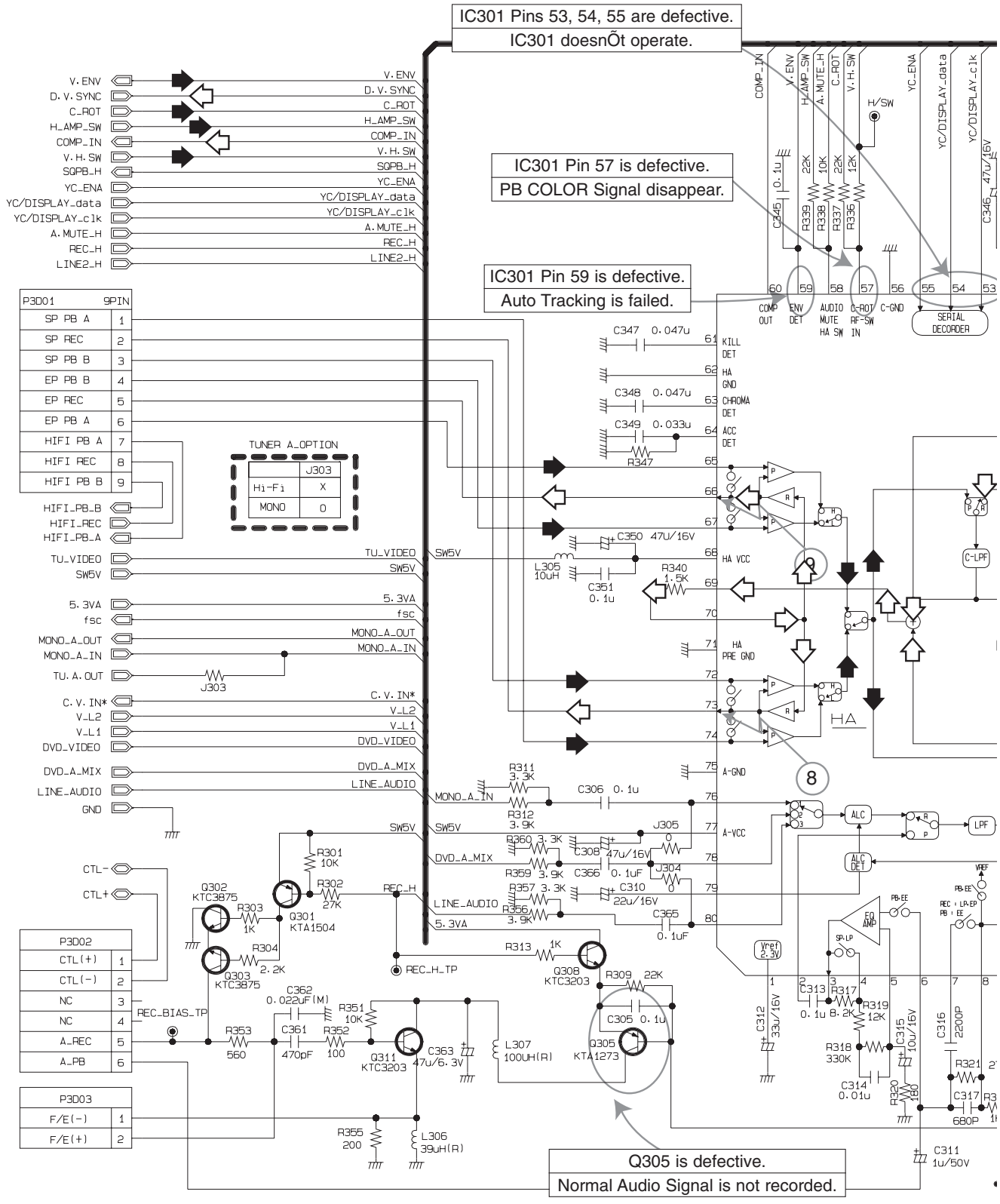
1. Shaded(■) parts are critical for safety. Replace only with specified part number.
2. Voltages are DC-measured with a digital voltmeter during Play mode.



3854R14921A

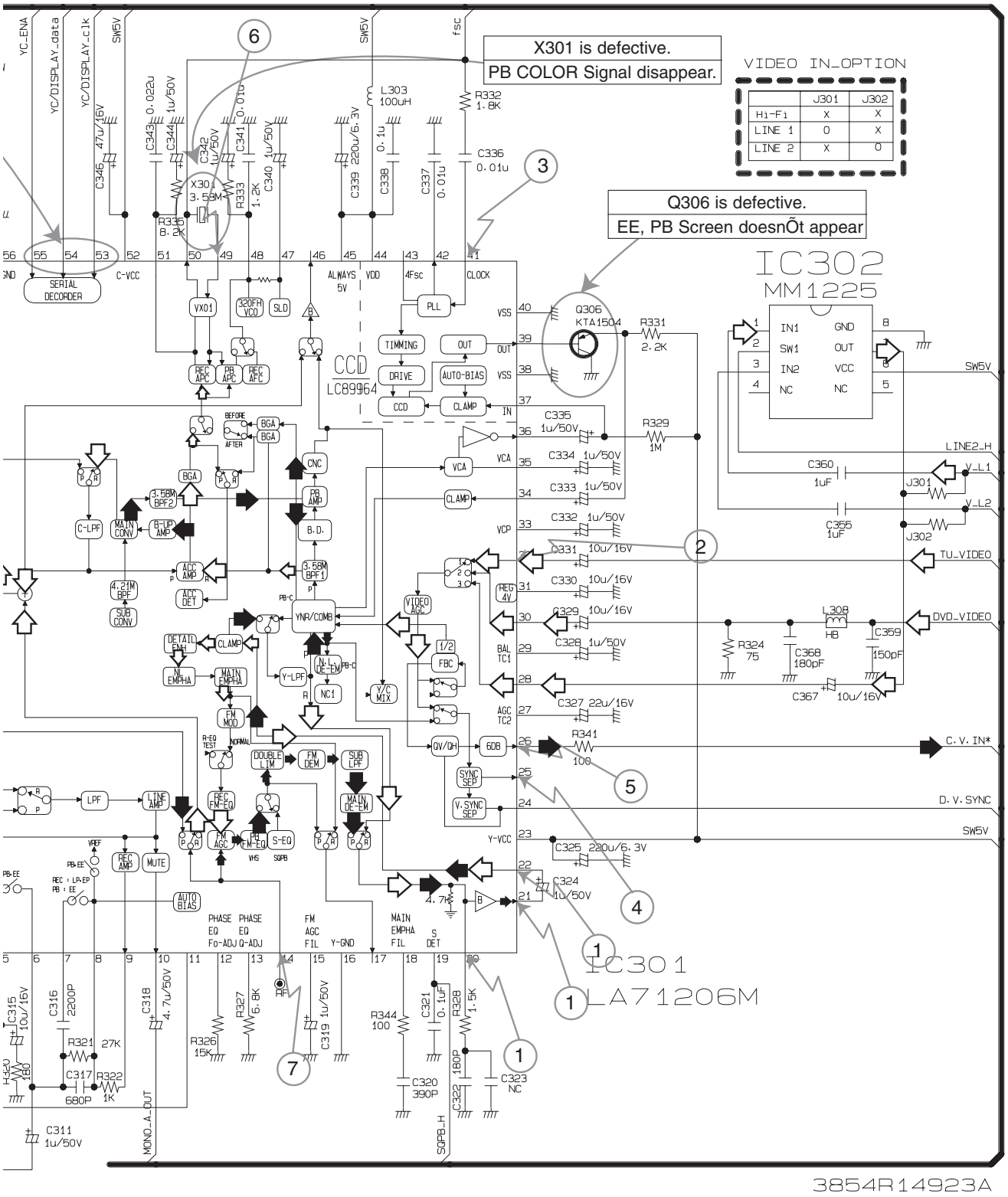
SHEET 1

■ A/V section



OPTION

	J304	J305	C365	C366	R356	R357	R359	R360
MONO	X	X	O	O	O	O	O	O
Hi-Fi	O	O	X	X	X	X	X	X

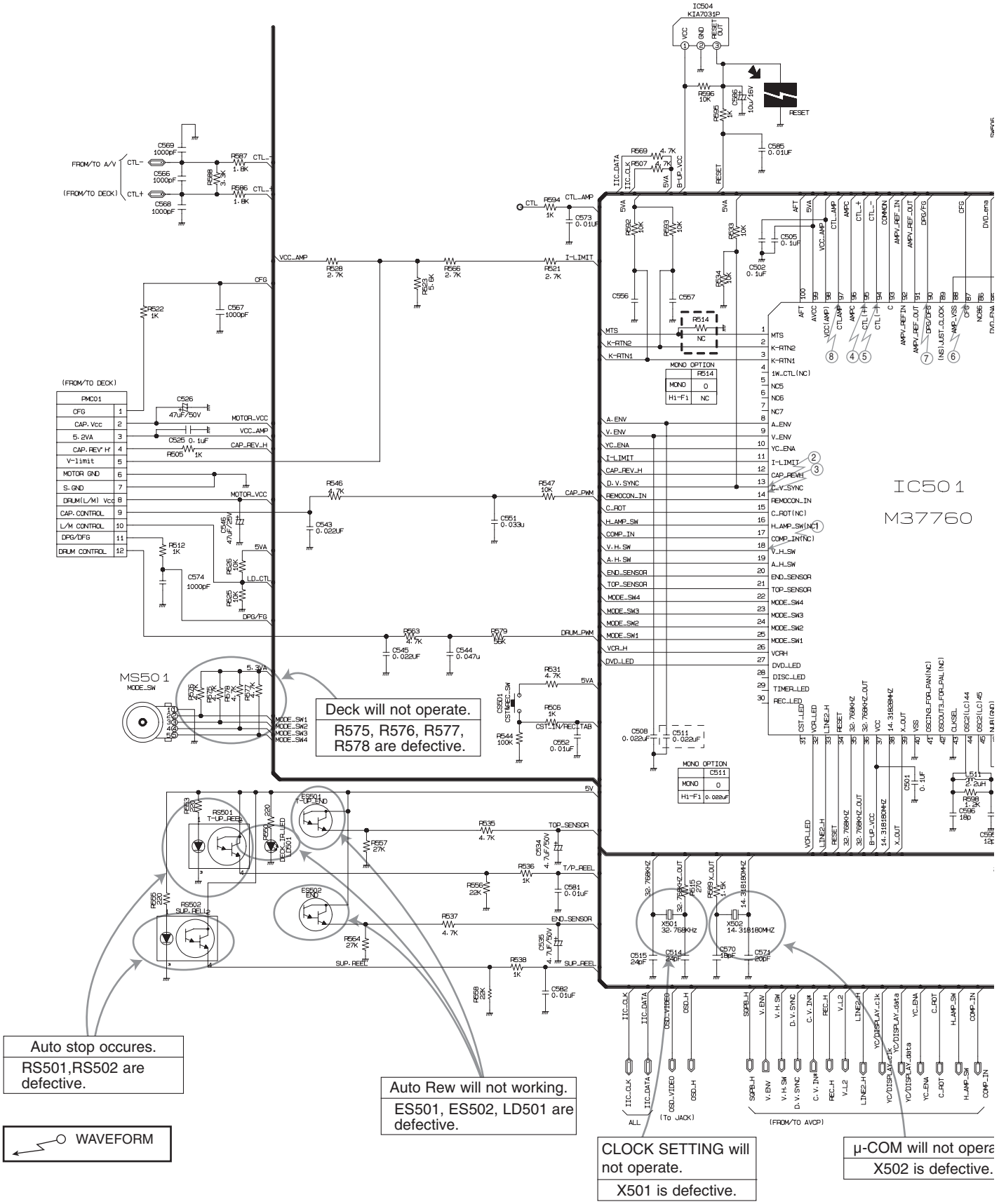


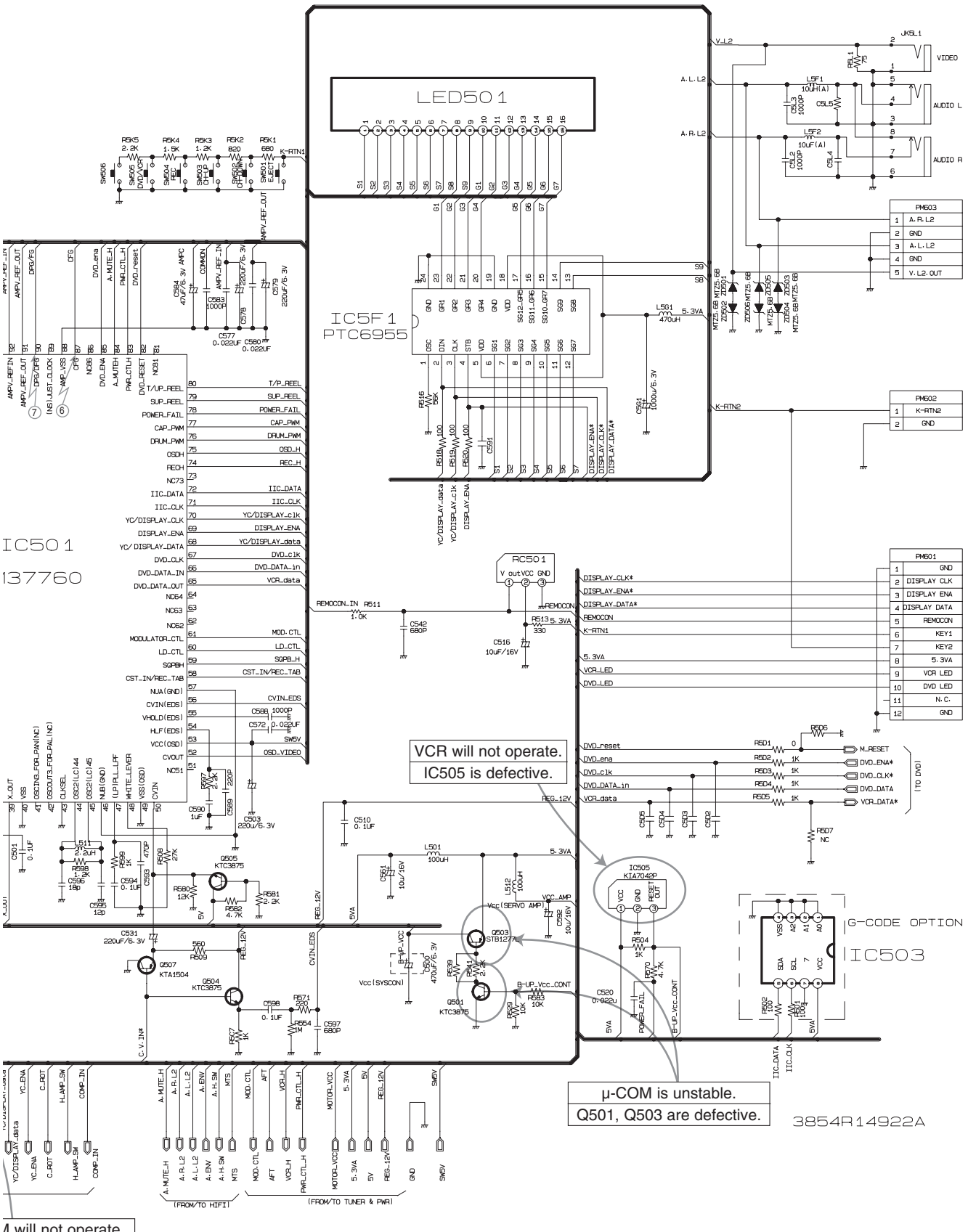
	J301	J302
H1-F1	X	X
LINE 1	O	X
LINE 2	X	O

359	R360
O	O
X	X

SHEET 2

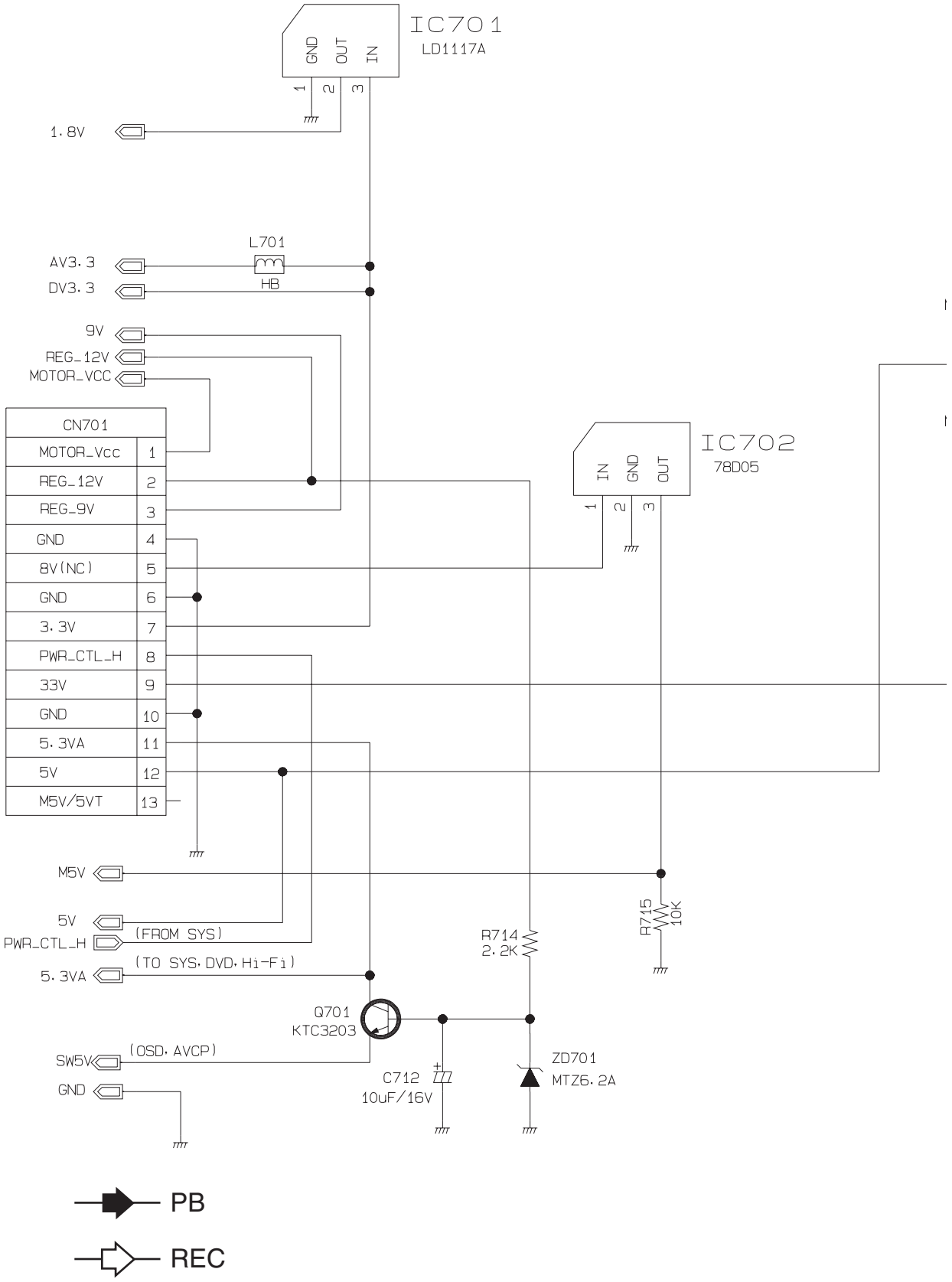
■ System control section

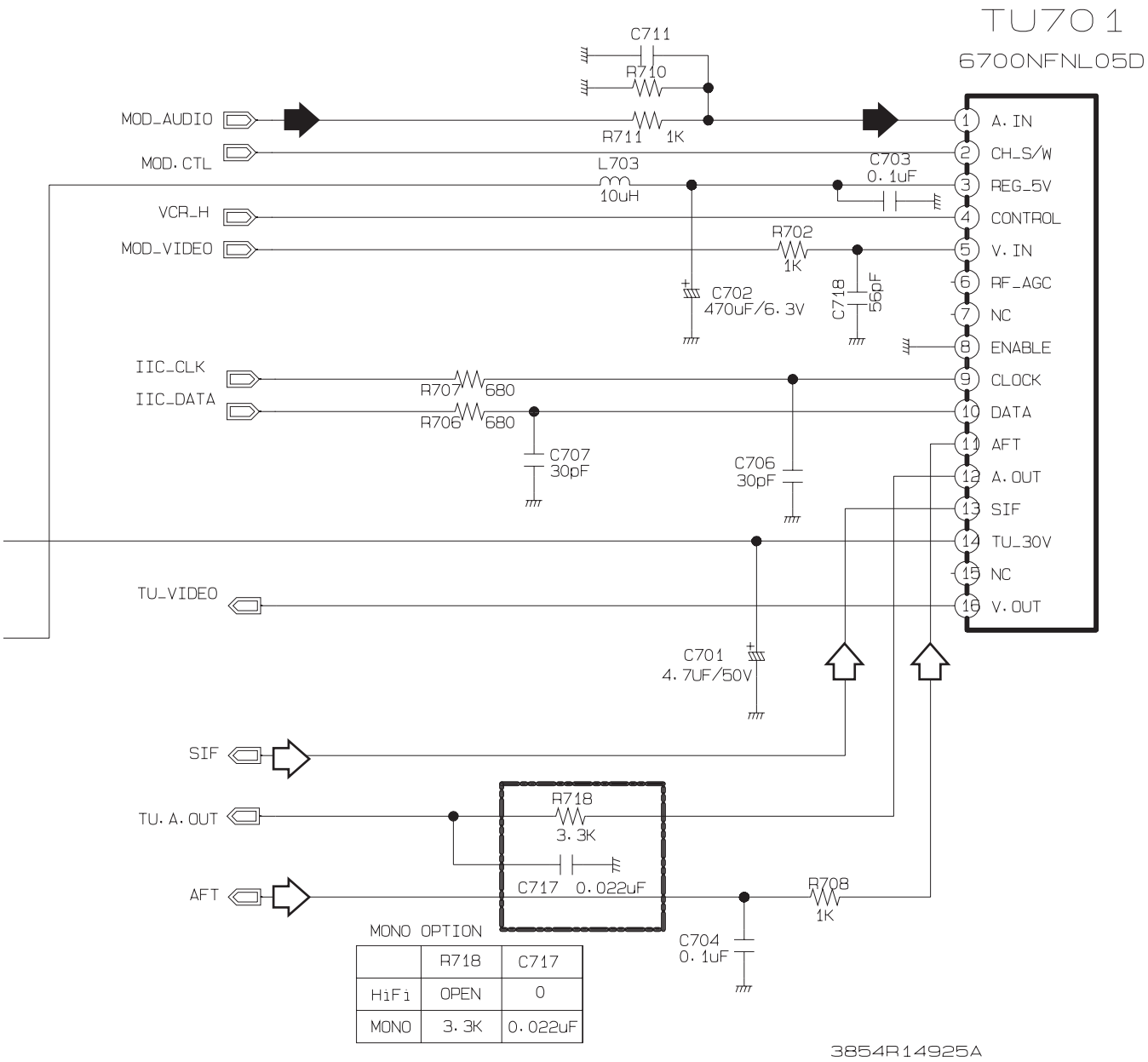



LED501
IC5F1
PTC6955
IC501
137760
RC501
IC505
KIA7042P
IC503
G-CODE OPTION
VCR will not operate.
IC505 is defective.
μ-COM is unstable.
Q501, Q503 are defective.
3854R14922A
M will not operate.
02 is defective.
(FROM/TO HIFI)
(FROM/TO TUNER & PWR)
(TO DVD)
VIDEO
AUDIO L
AUDIO R
PM603
PM602
PM601
JK5L1

SHEET 3

■ Tuner/Interface section



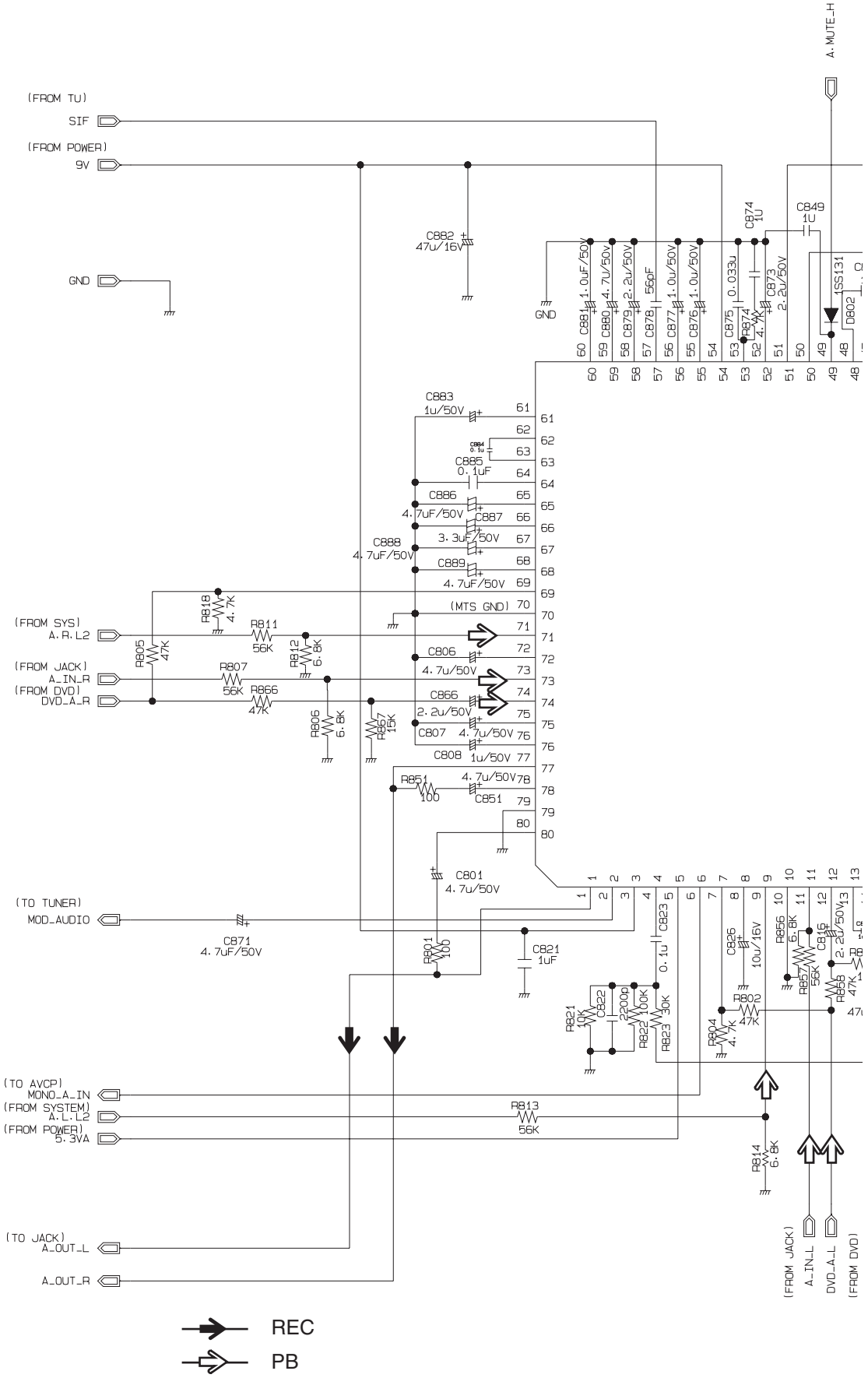


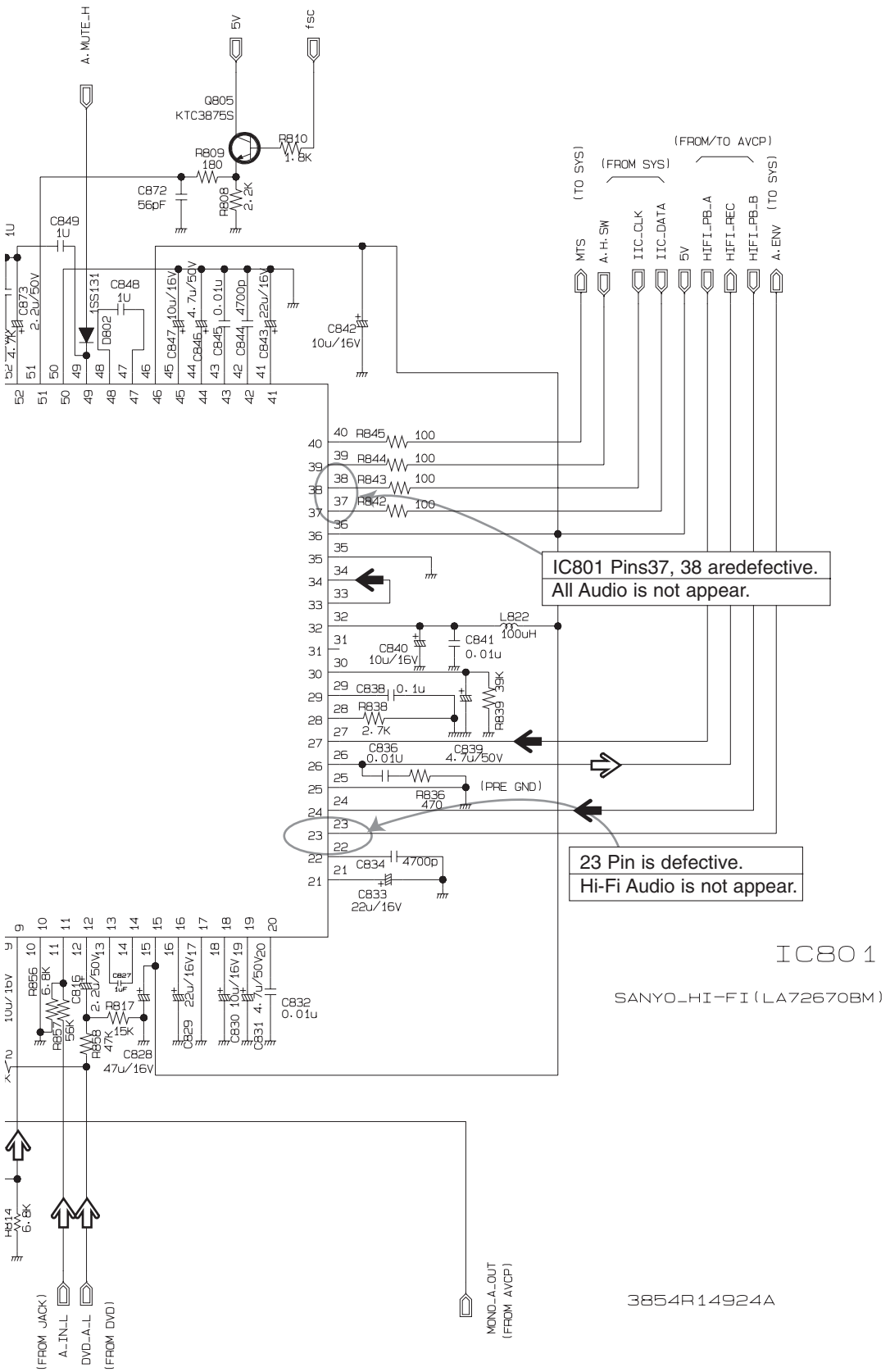
MONO OPTION

	R718	C717
HiFi	OPEN	0
MONO	3.3K	0.022uF

SHEET 4

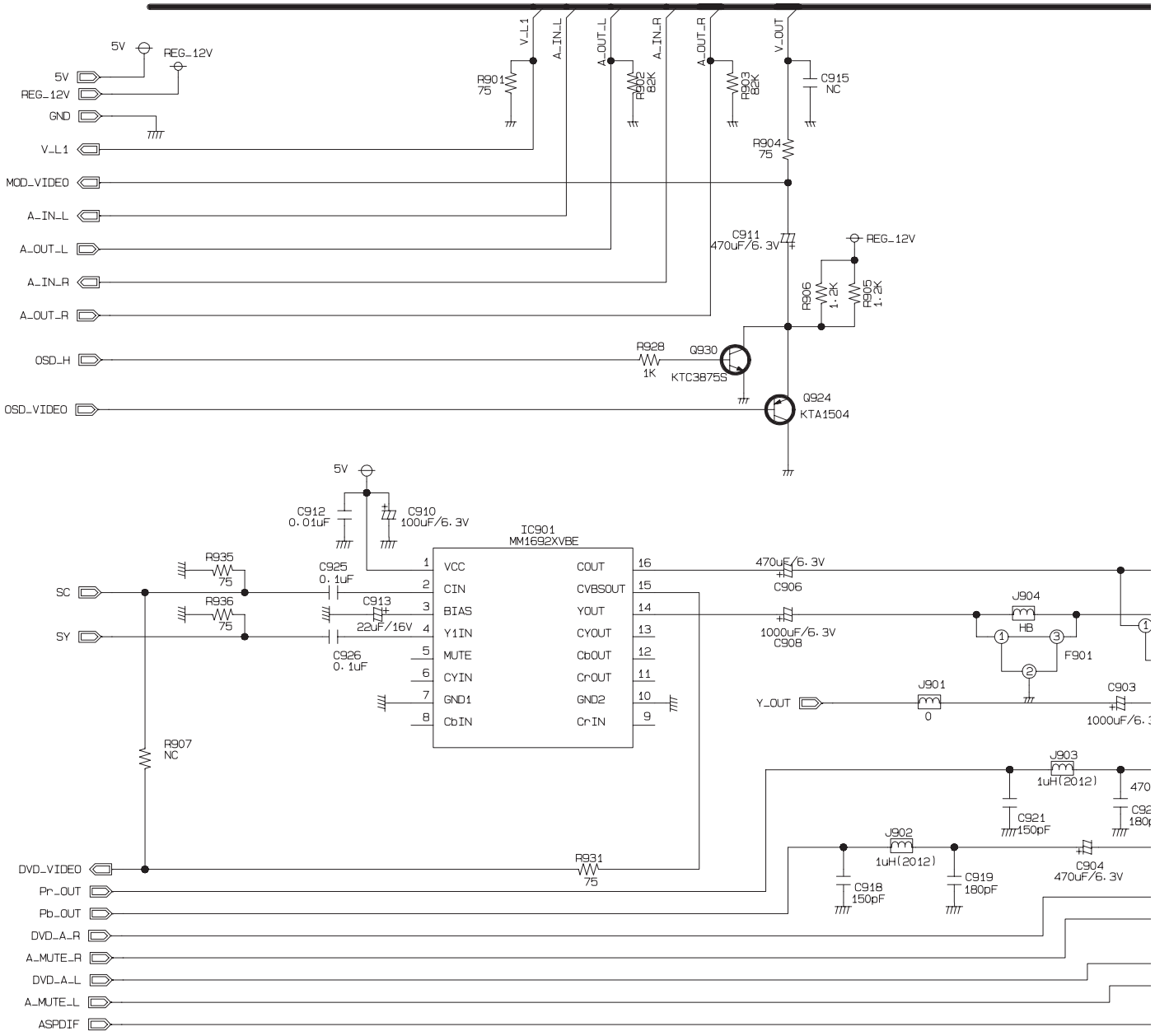
■ Hi-Fi section

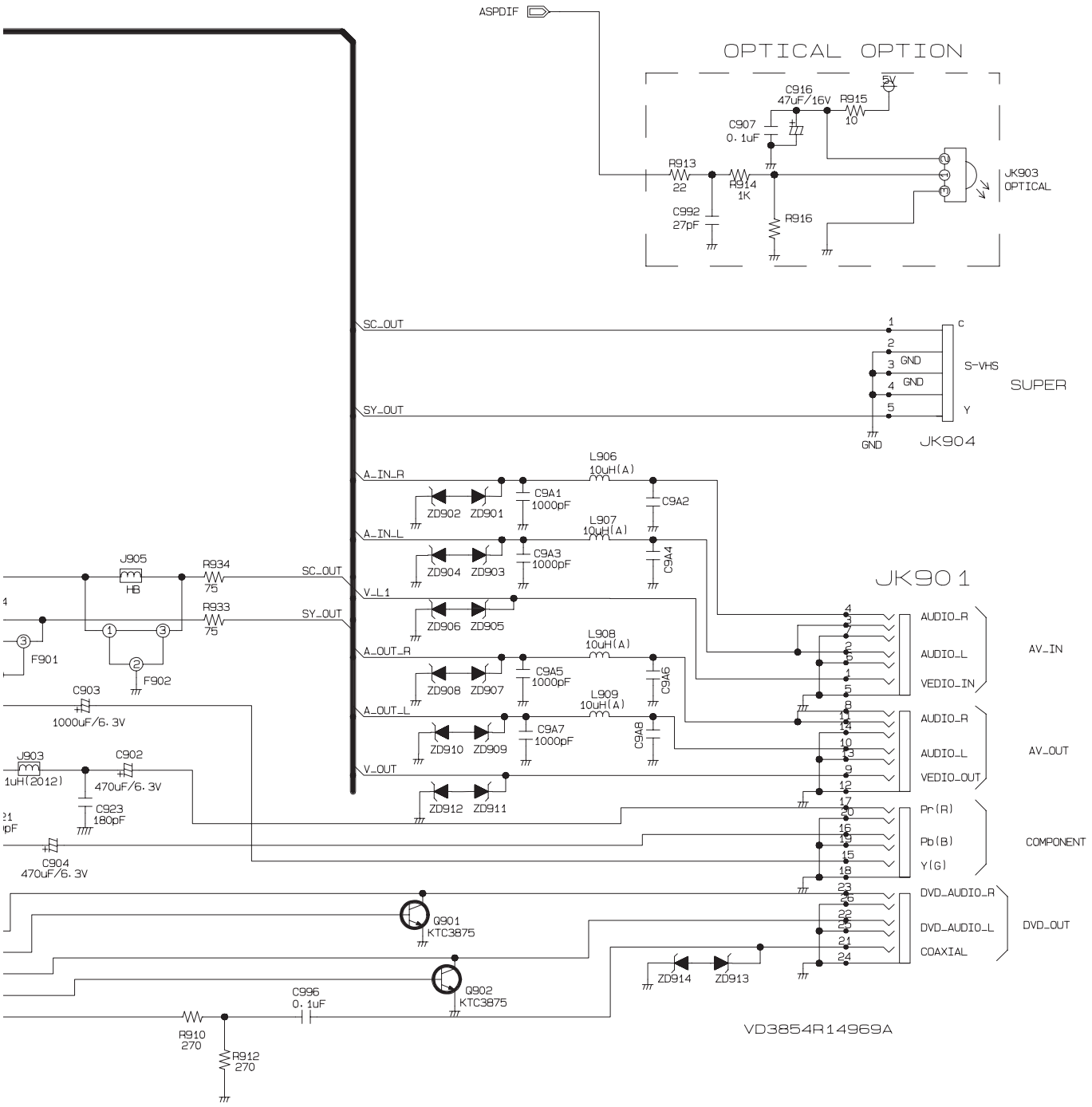



IC801 Pins37, 38 aredefective.
All Audio is not appear.
23 Pin is defective.
Hi-Fi Audio is not appear.
IC801
SANYO_HI-FI(LA72670BM)
3854R14924A

SHEET 5

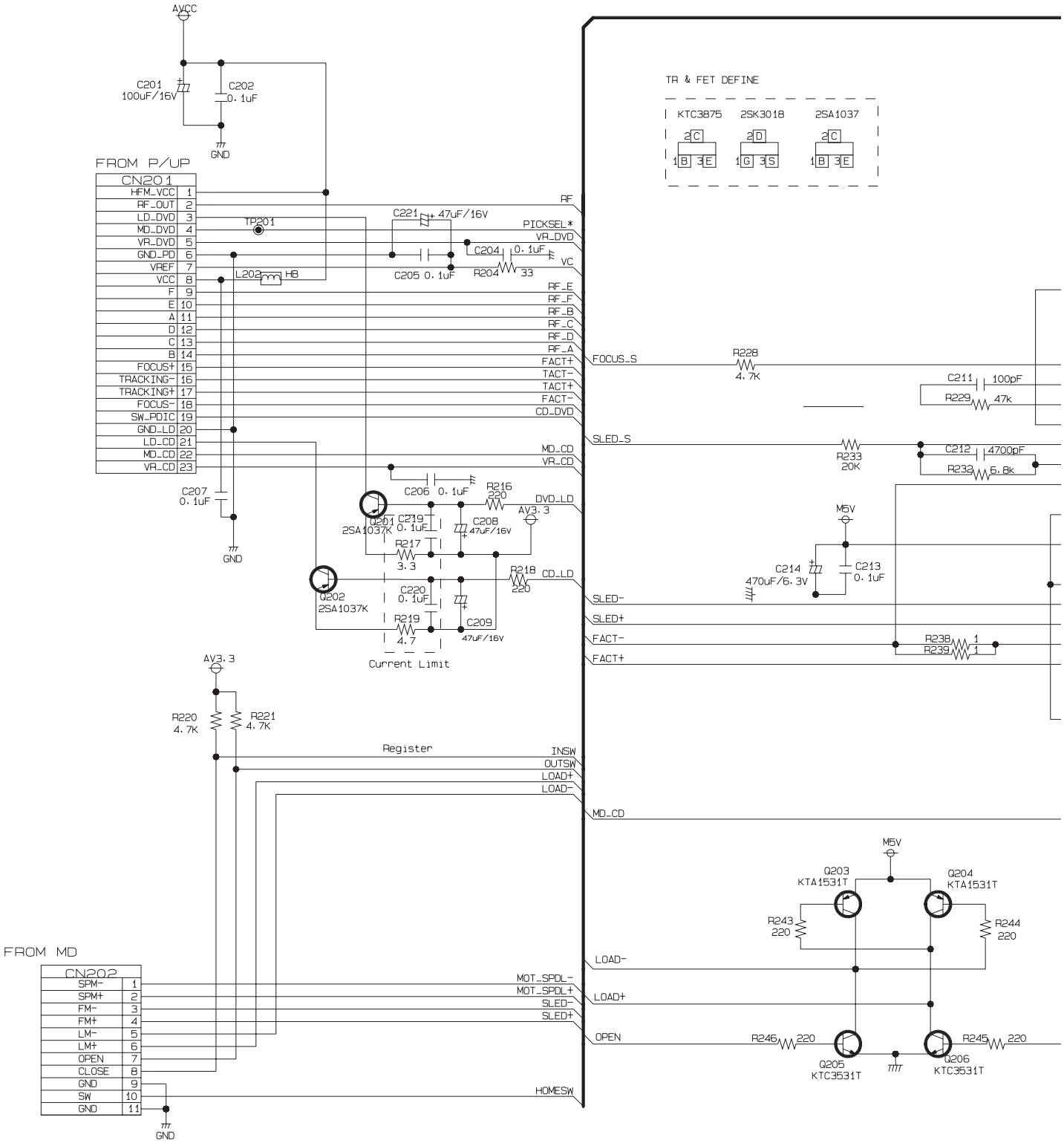
■ Jack section

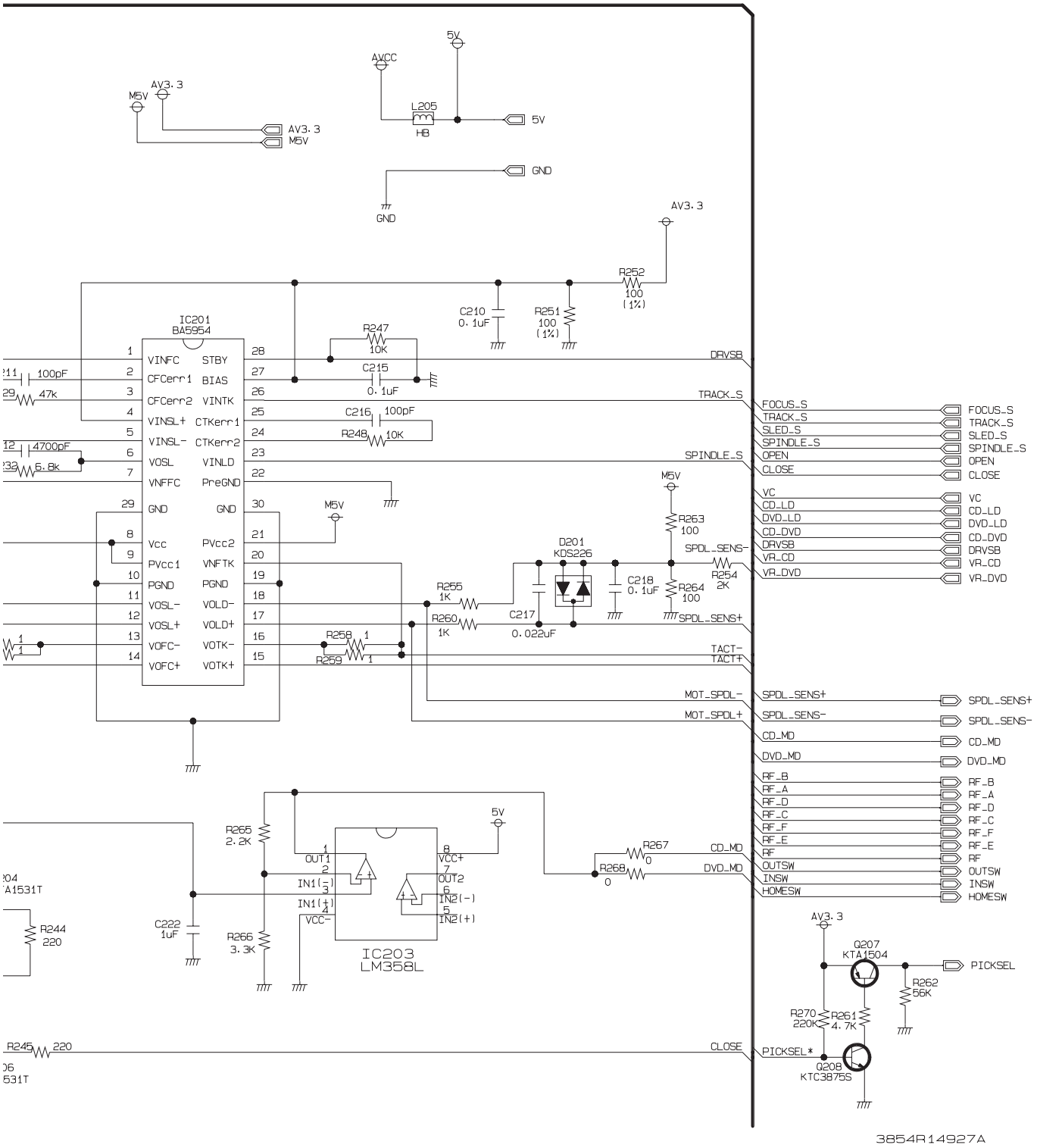



ASPDIF
OPTICAL OPTION
5V
C916
47uF/16V
R915
10
C907
0.1uF
R913
22
R914
1K
C992
27pF
R916
JK903
OPTICAL
SC_OUT
SY_OUT
1
2
3
4
5
C
GND
GND
S-VHS
Y
GND
SUPER
JK904
A_IN_R
A_IN_L
V_L1
A_OUT_R
A_OUT_L
V_OUT
L906
10uH(A)
L907
10uH(A)
L908
10uH(A)
L909
10uH(A)
C9A1
1000pF
C9A2
C9A3
1000pF
C9A4
C9A5
1000pF
C9A6
C9A7
1000pF
C9A8
ZD902
ZD901
ZD904
ZD903
ZD906
ZD905
ZD908
ZD907
ZD910
ZD909
ZD912
ZD911
ZD914
ZD913
J905
HB
R934
75
R933
75
F901
F902
C903
1000uF/6.3V
J903
1uH(2012)
C902
470uF/6.3V
C923
180pF
C904
470uF/6.3V
Q901
KTC3875
Q902
KTC3875
C996
0.1uF
R910
270
R912
270
JK901
AUDIO_R
AUDIO_L
VEDIO_IN
AV_IN
AUDIO_R
AUDIO_L
VEDIO_OUT
AV_OUT
Pr(R)
Pb(B)
Y(G)
COMPONENT
DVD_AUDIO_R
DVD_AUDIO_L
COAXIAL
DVD_OUT
VD3854R14969A

SHEET 6

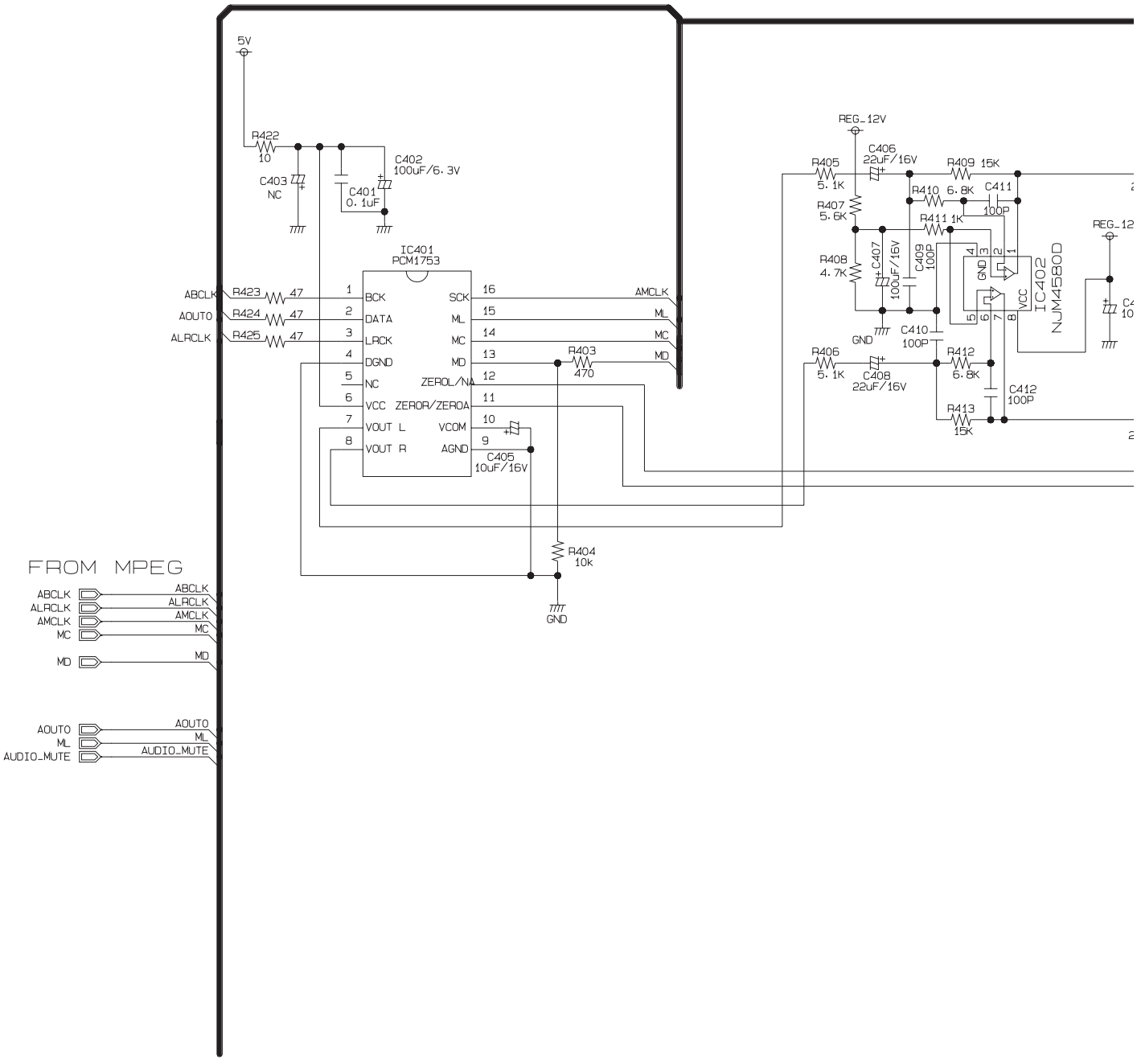
■ DVD Servo control section

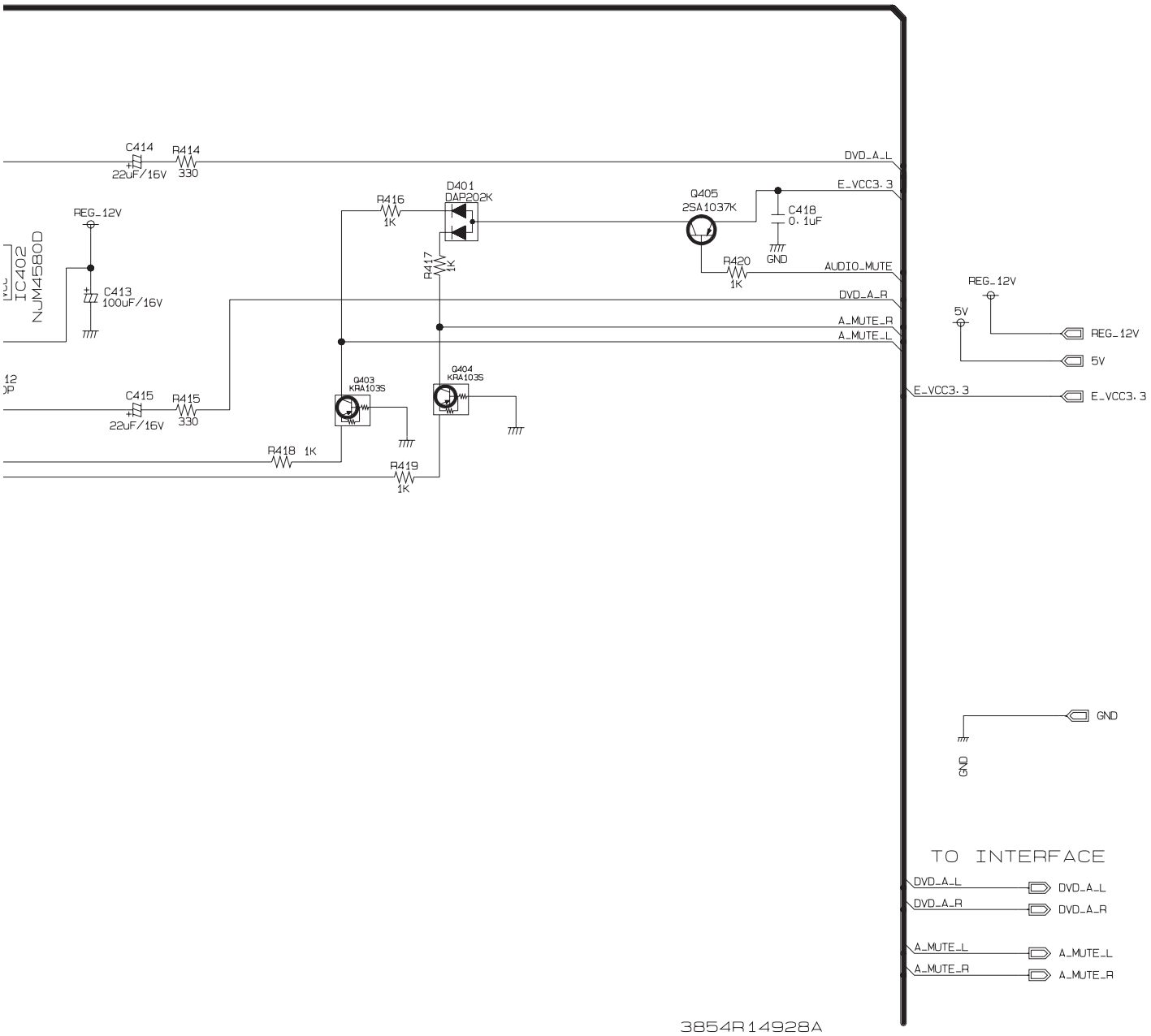



AV3.3
M5V
AV3.3
M5V
AVCC
5V
L205
HB
5V
GND
GND
AV3.3
R252
100
(1%)
C210
0.1uF
R251
100
(1%)
IC201
BA5954
R247
10K
C215
0.1uF
C216
100pF
R248
10K
100pF
47k
4700pF
5.8k
VINFC
STBY
CFCerr1
BIAS
CFCerr2
VINTK
VINSL+
CTKerr1
VINSL-
CTKerr2
VOSL
VINLD
VNFFC
PreGND
GND
GND
Vcc
PVcc2
PVcc1
VNFTK
PGND
PGND
VOSL-
VOLD-
VOSL+
VOLD+
VOFC-
VOTK-
VOFC+
VOTK+
M5V
R255
1K
R260
1K
R258
1
R259
1
D201
KDS226
C217
0.022uF
C218
0.1uF
M5V
R263
100
R264
100
R254
2K
SPDL_SENS-
SPDL_SENS+
DRVSB
TRACK_S
SPINDLE_S
TACT-
TACT+
MOT_SPDL-
MOT_SPDL+
FOCUS_S
TRACK_S
SLED_S
SPINDLE_S
OPEN
CLOSE
VC
CD_LD
DVD_LD
CD_DVD
DRVSB
VR_CD
VR_DVD
SPDL_SENS+
SPDL_SENS-
CD_MD
DVD_MD
RF_B
RF_A
RF_D
RF_C
RF_F
RF_E
RF
OUTSW
INSW
HOMESW
R265
2.2K
5V
OUT1
IN1(-)
IN1(+)
VCC-
VCC+
OUT2
IN2(-)
IN2(+)
IC203
LM358L
R267
0
R268
0
CD_MD
DVD_MD
R244
220
C222
1uF
R266
3.3K
AV3.3
Q207
KTA1504
PICKSEL
R262
56K
R270
220K
R261
4.7K
PICKSEL*
Q208
KTC3875S
R245
220
CLOSE
3854R14927A

SHEET 7

■ DVD A/V Jack section

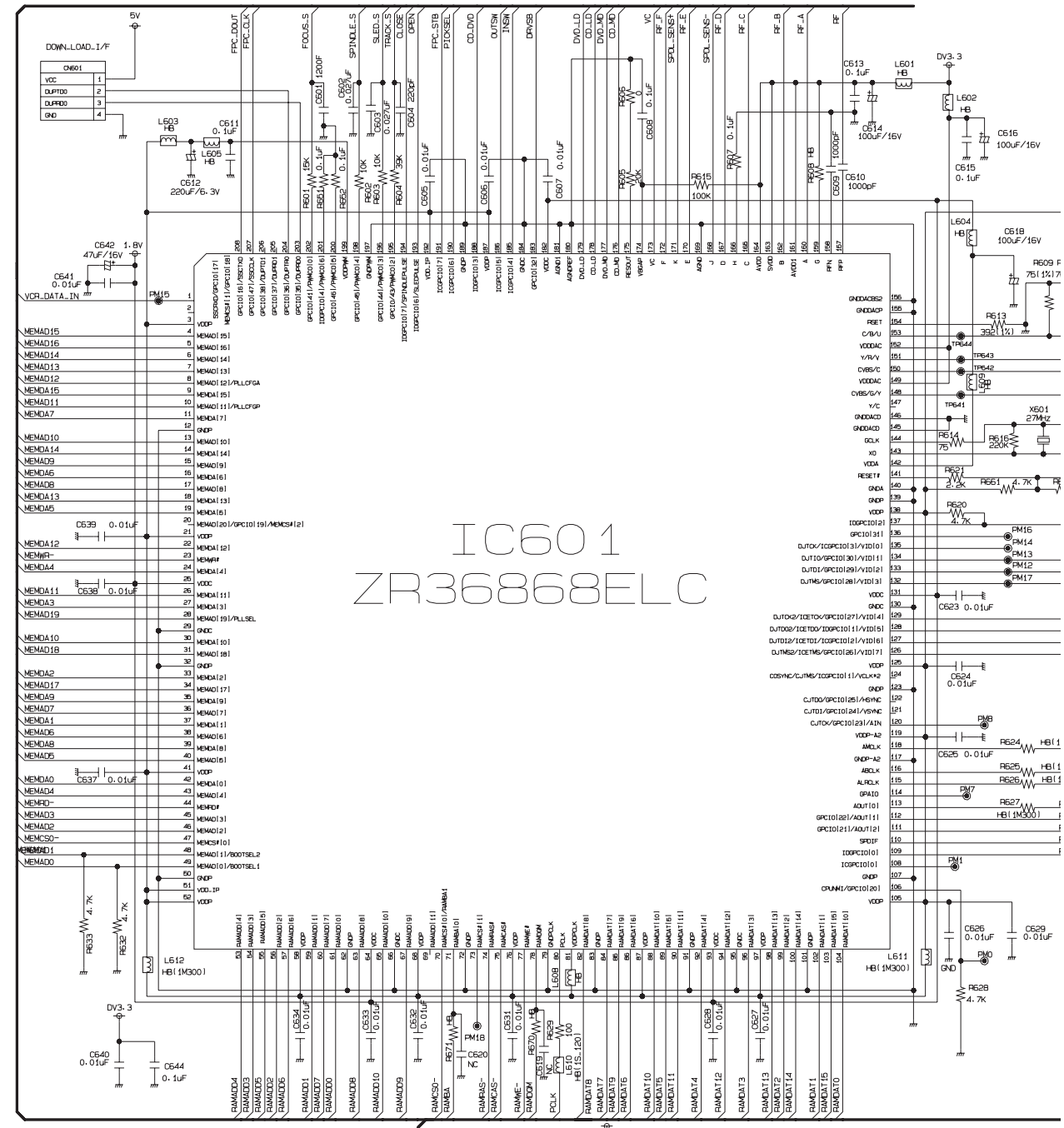


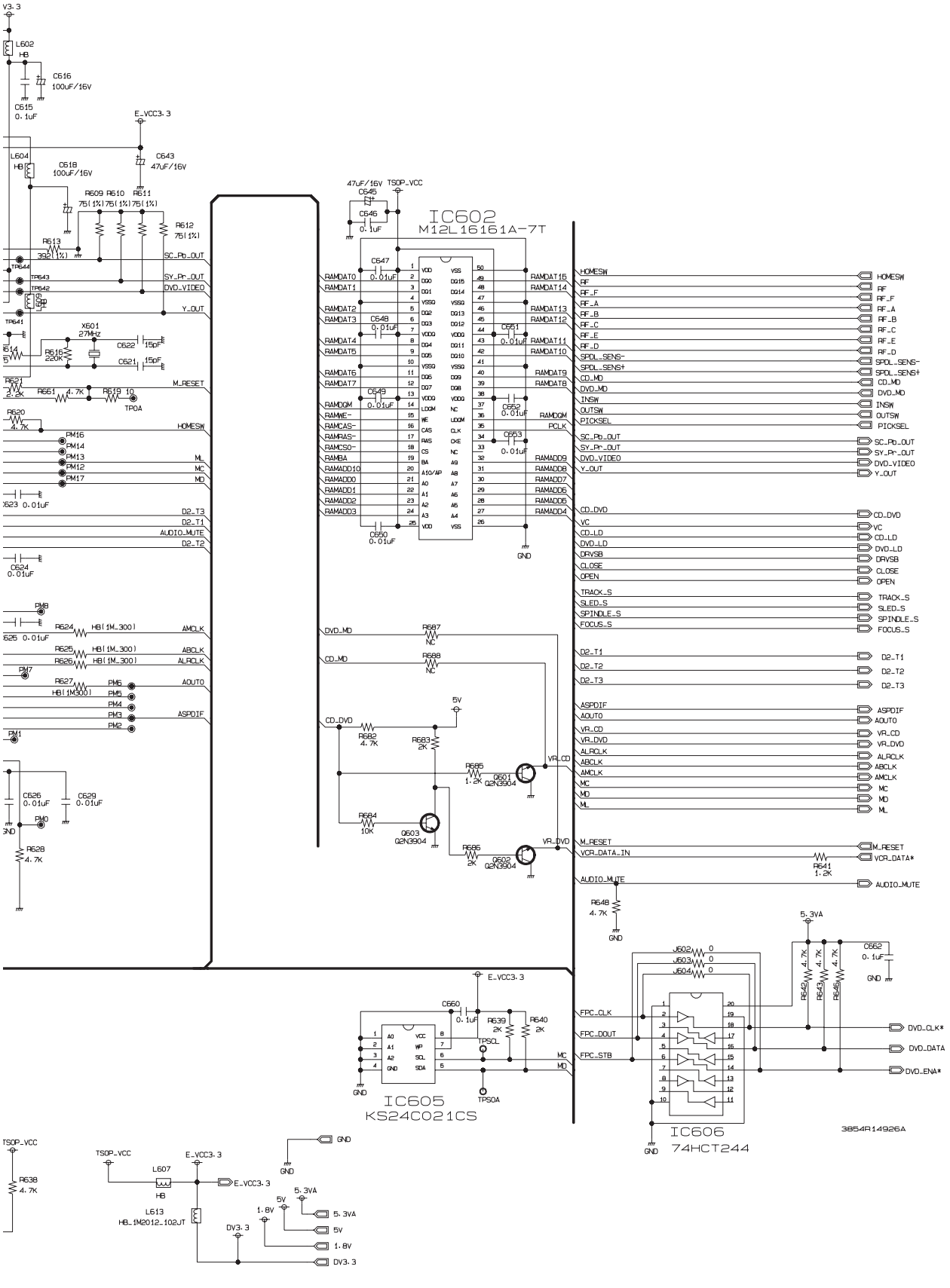


3854R14928A

SHEET 8

■ DVD System control section

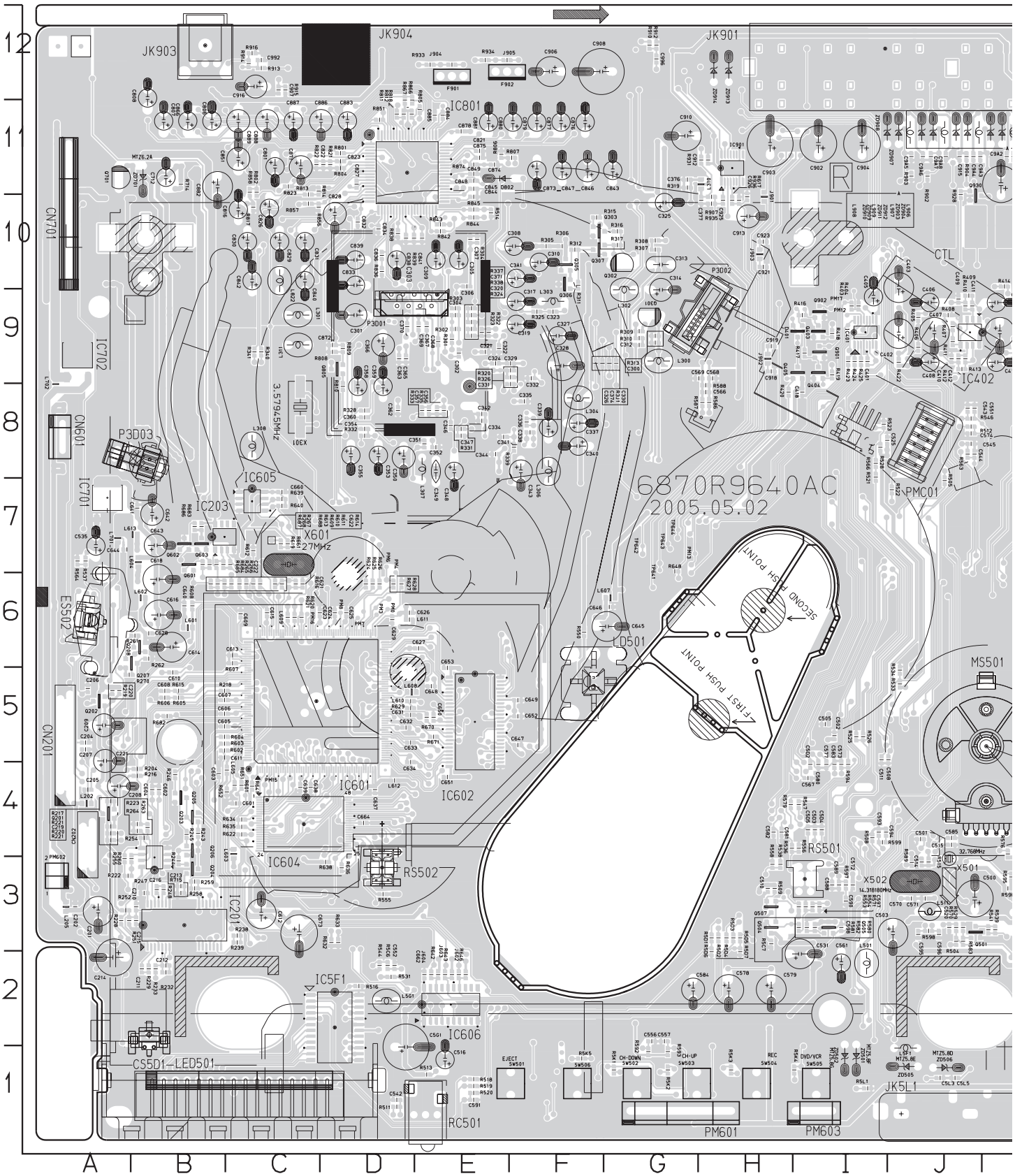

IC601
ZR36868ELC
IC604
39VF400A-70-4C-EK(70ns, 48PIN TSSOP)
JP601, JP602 Settings:
1) Play mode : All Jumps off
2) Download mode : JP602's 1-2 short only
3) SW Debug mode : JP 601's 1-2 short only

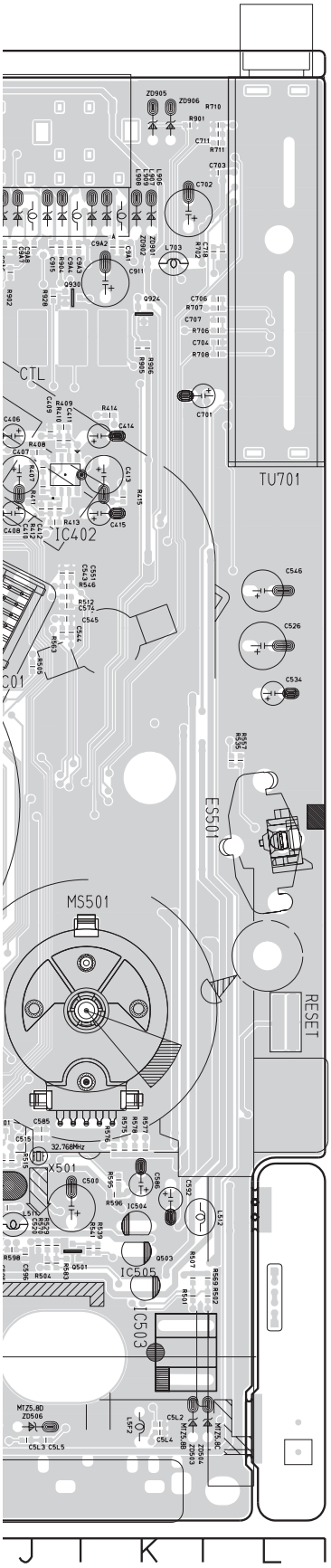

IC602
M12L16161A-7T
IC605
KS24C021CS
IC606
74HCT244
3854R14926A

SHEET 9

Printed circuit boards

■ Main board (Top side) <03>

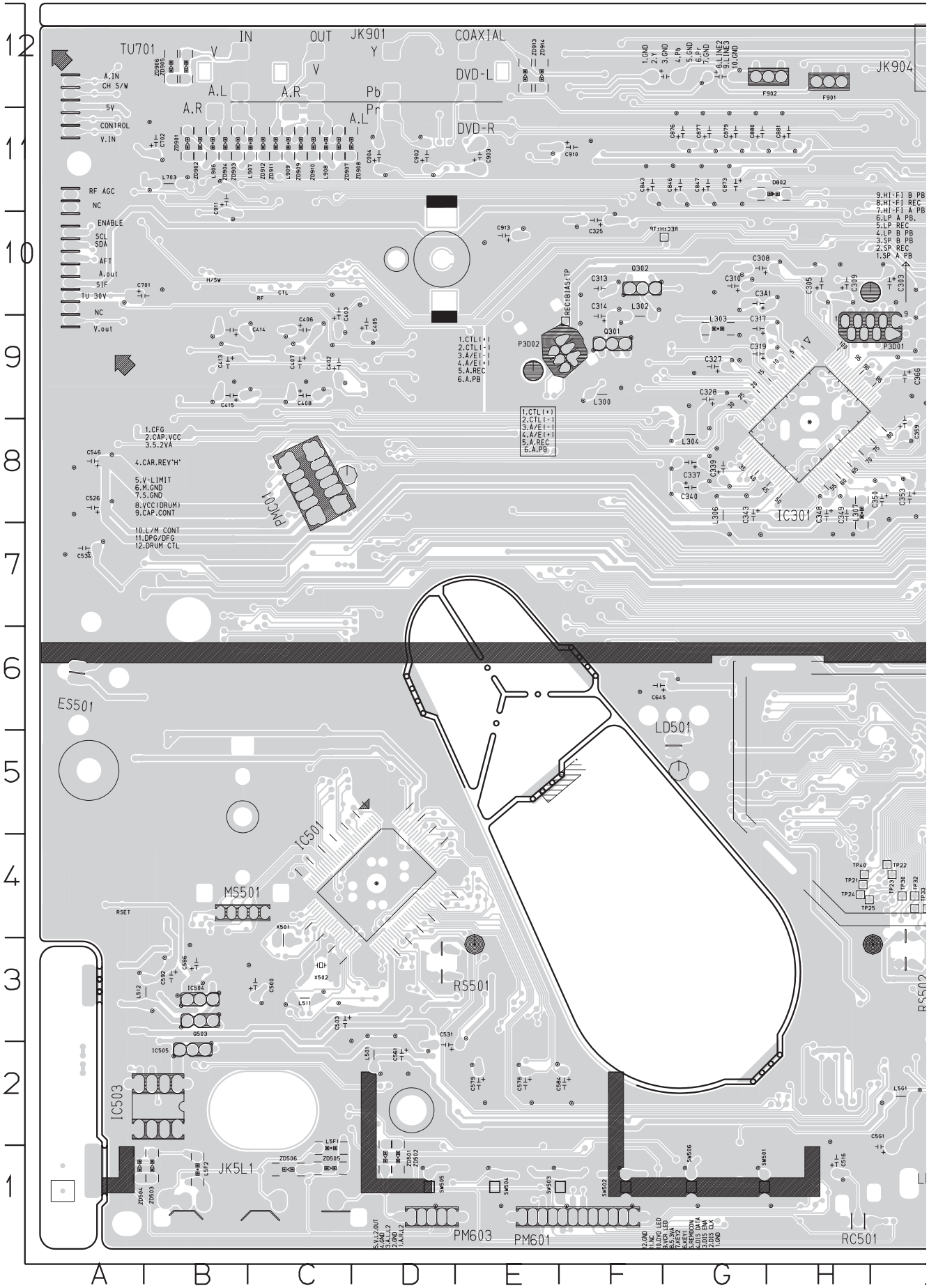


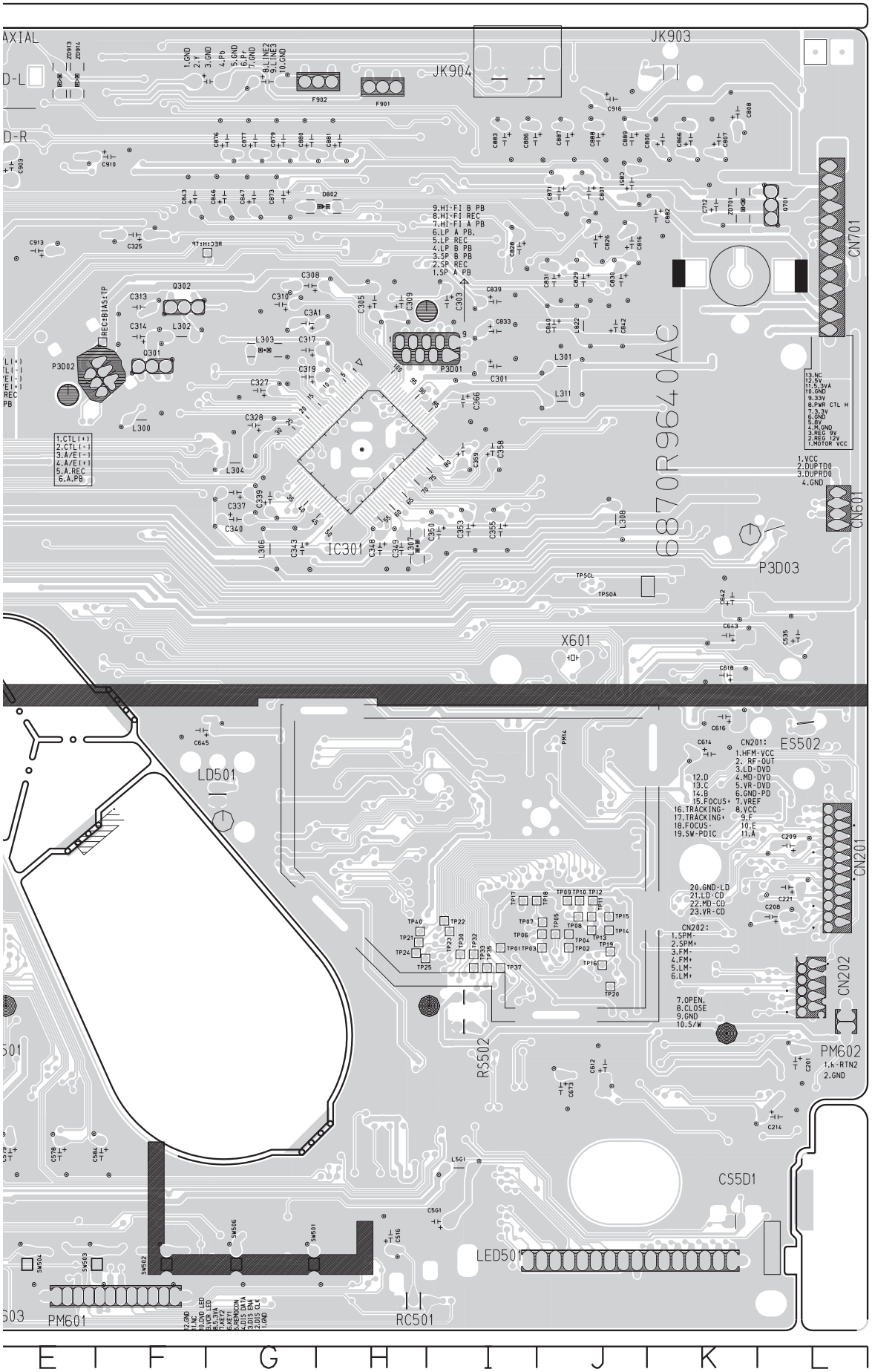


LOCATION GUIDE

C201	A3	C368	E9	C598	I3	C827	D11	ES502	A5	PIN0032	F9	R247	B3	R508	I4	R601	C4	R838	D10
C202	A3	C369	E9	C5D2	I4	C828	D10	F901	E12	PIN0035	E8	R248	B3	R509	H3	R602	B5	R839	D10
C204	A5	C370	D9	C5D3	I4	C829	C10	F902	E12	PIN0037	F8	R251	A3	R511	D1	R603	B5	R842	E10
C205	A4	C371	E9	C5D4	I4	C830	C10	IC201	B3	PIN0039	F8	R252	A3	R512	J8	R604	B5	R843	E10
C206	A5	C374	F9	C5D5	I4	C831	C10	IC202	B3	PIN0040	F8	R254	B4	R513	E1	R605	B5	R844	E10
C207	A5	C376	G11	C5G1	D1	C832	D10	IC203	B7	PIN0041	F8	R255	A3	R514	E10	R606	B5	R845	E10
C208	A4	C377	H10	C5L2	K1	C833	D10	IC401	I9	PIN0054	D9	R258	B3	R515	J3	R607	C6	R851	D11
C209	A5	C3A1	F10	C5L3	J1	C834	D10	IC402	J9	PIN0055	E9	R259	B3	R516	D2	R608	B6	R856	C10
C210	B3	C401	I9	C5L4	K1	C836	D10	IC503	K2	PIN0056	D9	R260	B3	R518	E1	R609	C6	R857	C10
C211	B2	C402	J9	C5L5	J1	C838	D10	IC504	K3	PIN0059	E9	R261	B6	R519	E1	R610	C6	R858	C11
C212	B2	C403	J10	C601	C4	C839	D10	IC505	K2	PIN0204	E9	R262	B6	R520	E1	R611	C6	R866	D11
C213	B3	C405	I9	C602	B4	C840	C10	IC5F1	D2	PIN0393	G8	R263	B4	R521	I8	R612	C7	R867	D11
C214	A2	C406	J9	C603	B4	C841	E10	IC601	C5	PIN0396	F10	R264	B4	R522	J7	R613	C6	R874	E11
C215	B3	C407	J9	C604	B4	C842	C10	IC602	E5	PM0	D6	R265	B7	R523	I8	R614	C6	R901	K12
C216	B3	C408	J9	C605	B5	C843	G11	IC604	C4	PM12	I9	R266	B7	R525	I5	R615	B5	R902	J11
C219	A4	C409	J9	C606	B5	C844	E10	IC605	C7	PM13	G7	R267	B6	R526	I5	R616	C6	R903	J11
C220	A5	C410	J9	C607	B5	C845	E11	IC606	E2	PM15	C4	R268	B6	R528	I8	R617	H10	R904	J11
C221	A5	C411	J9	C608	B5	C846	F11	IC701	A7	PM16	C6	R270	A5	R529	J3	R619	C7	R905	K10
C222	C7	C412	J9	C609	C6	C847	F11	IC702	A9	PM17	I9	R301	E9	R531	D2	R620	C6	R906	K10
C300	G9	C413	K9	C610	B5	C848	E11	IC801	D11	PM18	D5	R302	E9	R533	J5	R621	C6	R907	H10
C301	D9	C414	K9	C611	B5	C849	E11	IC901	H11	PM3	D6	R303	E9	R534	J5	R622	C4	R910	G12
C302	E9	C415	K9	C612	C3	C851	C11	J602	E2	PM4	D6	R304	E10	R535	L7	R624	D6	R912	G12
C303	D10	C418	I8	C613	C6	C866	B11	J603	E2	PM6	D7	R305	F10	R536	H4	R625	D6	R913	C12
C304	E9	C500	J3	C614	B6	C871	C11	J604	E2	PM601	G1	R306	F10	R537	A7	R626	D6	R914	C12
C305	E10	C501	J4	C615	C6	C872	D9	J901	H10	PM602	A3	R307	G10	R538	H3	R627	D6	R915	C12
C306	E10	C502	I5	C616	B6	C873	F11	J902	H9	PM603	I1	R308	G10	R539	K3	R628	D6	R916	C12
C307	E10	C503	J3	C618	B6	C874	E11	J903	H10	PM7	D6	R309	G9	R541	K3	R629	D5	R928	J10
C308	F10	C505	I5	C621	C6	C875	E11	J904	E12	PM8	D6	R310	G9	R544	D2	R632	D3	R931	H11
C309	E10	C508	J5	C622	C6	C876	F11	J905	E12	PMC01	J8	R311	F10	R546	J8	R633	D3	R933	E12
C310	F10	C510	H3	C623	C6	C877	F11	JK5L1	J1	Q201	A4	R312	F10	R547	I4	R634	C4	R934	E12
C312	G9	C511	I5	C624	D6	C878	E11	JK901	I12	Q202	A5	R313	G9	R550	F6	R635	C4	R935	H10
C313	G10	C514	J3	C625	D6	C879	F11	JK903	B12	Q203	B4	R315	F10	R553	I3	R636	D3	R936	H10
C314	G9	C515	J4	C626	D6	C880	F11	JK904	D12	Q204	B3	R316	G10	R554	I3	R638	D3	RC501	E1
C317	F9	C516	E1	C627	E6	C881	E11	L202	A4	Q205	B4	R317	G10	R555	D3	R639	C7	RESET	L5
C319	F9	C520	J3	C628	B6	C882	B11	L205	A3	Q206	B4	R319	G11	R556	I4	R640	C7	RF±TP	K10
C320	E9	C525	I8	C629	D6	C883	D11	L300	G9	Q207	B6	R320	F9	R557	L7	R641	C4	RS501	I3
C321	E9	C526	L8	C631	D5	C884	E11	L301	C9	Q208	B6	R322	E9	R558	H3	R642	E2	RS502	D3
C322	E9	C531	I2	C632	D5	C885	E11	L302	G9	Q301	G9	R323	E9	R563	J8	R643	E2	SW501	F1
C323	F9	C534	L7	C633	D5	C886	D11	L303	F9	Q302	G10	R324	E9	R564	A7	R646	E2	SW502	G1
C324	E9	C535	A7	C634	D4	C887	C11	L304	F8	Q303	F10	R325	F9	R566	I8	R648	G7	SW503	G1
C325	G10	C542	D1	C637	D4	C888	C11	L306	F8	Q305	F10	R326	F9	R569	L2	R651	C4	SW504	H1
C326	F9	C543	J8	C638	C4	C889	C11	L307	E8	Q306	F10	R328	D8	R570	J3	R652	C4	SW505	I1
C327	F9	C544	J8	C639	C4	C902	I11	L308	C8	Q307	F10	R331	E8	R571	I3	R661	C7	SW506	F1
C328	F9	C545	J8	C640	B6	C903	H11	L310	H11	Q403	I9	R332	D8	R575	K4	R670	E5	TP0A	C7
C329	F9	C546	L8	C641	B7	C904	I11	L311	C9	Q404	I9	R333	E8	R576	K4	R671	E5	TP641	G7
C330	G9	C551	J8	C642	B7	C906	F12	L501	I2	Q405	I9	R335	E8	R577	K4	R682	B5	TP642	G7
C331	F8	C552	D2	C643	B7	C907	C12	L511	J3	Q501	J3	R337	E9	R578	K4	R683	B7	TP643	G7
C332	F9	C556	G2	C644	A7	C908	F12	L512	K3	Q503	K3	R338	E9	R579	H4	R684	B7	TP644	G7
C334	E8	C557	G2	C645	G6	C910	G11	L5F1	J1	Q504	H3	R339	F8	R580	I3	R685	B7	TU701	L12
C335	F8	C561	I2	C646	G6	C911	K11	L5F2	K1	Q505	I3	R340	C9	R581	I3	R686	B7	V.H/SWTR	K10
C336	F8	C566	H8	C647	F5	C912	H11	L5G1	D2	Q507	H3	R341	C9	R582	I3	R687	B6	X301	C8
C337	F8	C567	I4	C648	E5	C913	H10	L601	B6	Q601	B7	R3J1	G9	R583	J3	R688	C6	X501	J3
C338	F8	C568	H9	C649	F5	C915	J11	L602	B6	Q602	B7	R403	I9	R586	H8	R702	L11	X502	J3
C339	F8	C569	H9	C650	E5	C916	C12	L603	C4	Q603	B7	R404	I9	R587	H8	R706	L10	X601	C7
C340	F8	C570	J3	C651	E4	C918	H9	L604	B7	Q701	A11	R405	J9	R588	H8	R707	L10	ZD501	I1
C341	E8	C571	J3	C652	F5	C919	H9	L605	C4	Q805	D9	R406	J9	R589	J3	R708	L10	ZD502	I1
C342	E8	C572	I3	C653	E5	C921	H10	L607	G6	Q901	I9	R407	J9	R592	G1	R710	L12	ZD503	K1
C343	F8	C573	I4	C660	C7	C923	H10	L608	D5	Q902	I9	R408	J9	R593	G1	R711	L12	ZD504	L1
C344	E8	C574	J8	C662	E2	C925	H10	L609	C6	Q924	K10	R409	J9	R594	I4	R714	B11	ZD505	J1
C346	E8	C577	I4	C664	D4	C926	H10	L610	D5	Q930	J10	R410	J9	R595	K3	R715	B3	ZD506	J1
C347	E8	C578	H2	C673	C3	C992	C12	L611	D6	R204	B4	R411	J9	R596	K3	R801	D11	ZD701	B11
C348	E8	C579	H2	C701	L10	C996	G12	L612	D4	R216	B4	R412	J9	R597	I3	R802	C11	ZD901	K11
C349	E8	C580	I4	C702	K11	C9A1	K11	L613	B7	R217	A4	R413	J9	R598	J3	R804	D11	ZD902	K11
C350	D8	C581	H4	C703	L11	C9A2	K11	L701	A7	R218	B5	R414	K10	R599	I4	R805	E11	ZD903	K11
C351	E8	C582	H4	C704	L10	C9A3	J11	L702	A8	R219	A5	R415	K9	R5C6	D2	R806	E11	ZD904	K11
C352	E8	C583	I4	C706	L10	C9A4	J11	L703	K11	R220	A4	R416	I9	R5C7	H3	R807	F11	ZD905	K12
C353	D8	C584	G2	C707	L10	C9A5	J11	L822	C10	R221	A4	R417	I9	R5D1	H3	R808	D9	ZD906	K12
C354	D8	C585	J4	C711	L12	C9A6	J11	L906	K11	R222	A3	R418	I9	R5D2	H3	R809	D9	ZD907	J11
C355	D8	C586	K3	C712	B11	C9A7	J11	L907	J11	R223	B4	R419	I9	R5D3	H3	R810	D8	ZD908	I11
C356	E8	C588	I3	C718	L11	C9A8	J11	L908	J11	R228	A3	R420	H8	R5D4	H3	R811	D11	ZD909	J11
C357	E8	C589	I3	C801	C11	CN201	A5	L909	J11	R229	B2	R422	J9	R5D5	H3	R812	D11	ZD910	J11
C358	D8	C590	I3	C806	B11	CN202	A4	LD501	F5	R232	B2	R423	I9	R5D6	H2	R813	C10	ZD911	J11
C359	D8	C591	E1	C807	B11	CN601	A8	LED501	B1	R233	B2	R424	I9	R5D7	H2	R814	C11	ZD912	J11
C360	D8	C592	K3	C808	B12	CN701	A10	MS501	K4	R238	C3	R425	I9	R5K1	G1	R817	C10	ZD913	H12
C362	D8	C593	I4	C816	C10	CS5D1	B2	P3D01	E9	R239	C3	R501	K2	R5K2	G1	R818	D11	ZD914	H12
C363	D9	C594	I4	C821	E11	CTL	J10	P3D02	G9	R243	B4	R502	L2	R5K3	H1	R821	D11		
C365	D9	C595	J3	C822	D11	D401	I9	P3D03	A8	R244	B3	R504	J3	R5K4	I1	R822	C11		
C366	D9	C596	J3	C823	D11	D802	E11	PIN0020	E9	R245	B4	R505	J7	R5K5	F1	R823	C11		
C367	E9	C597	I3	C826	C10	ES501	L7	PIN0022	E9	R246	B4	R507	K2	R5L1	I1	R836	D10		

■ Main board (Bottom side) <03>

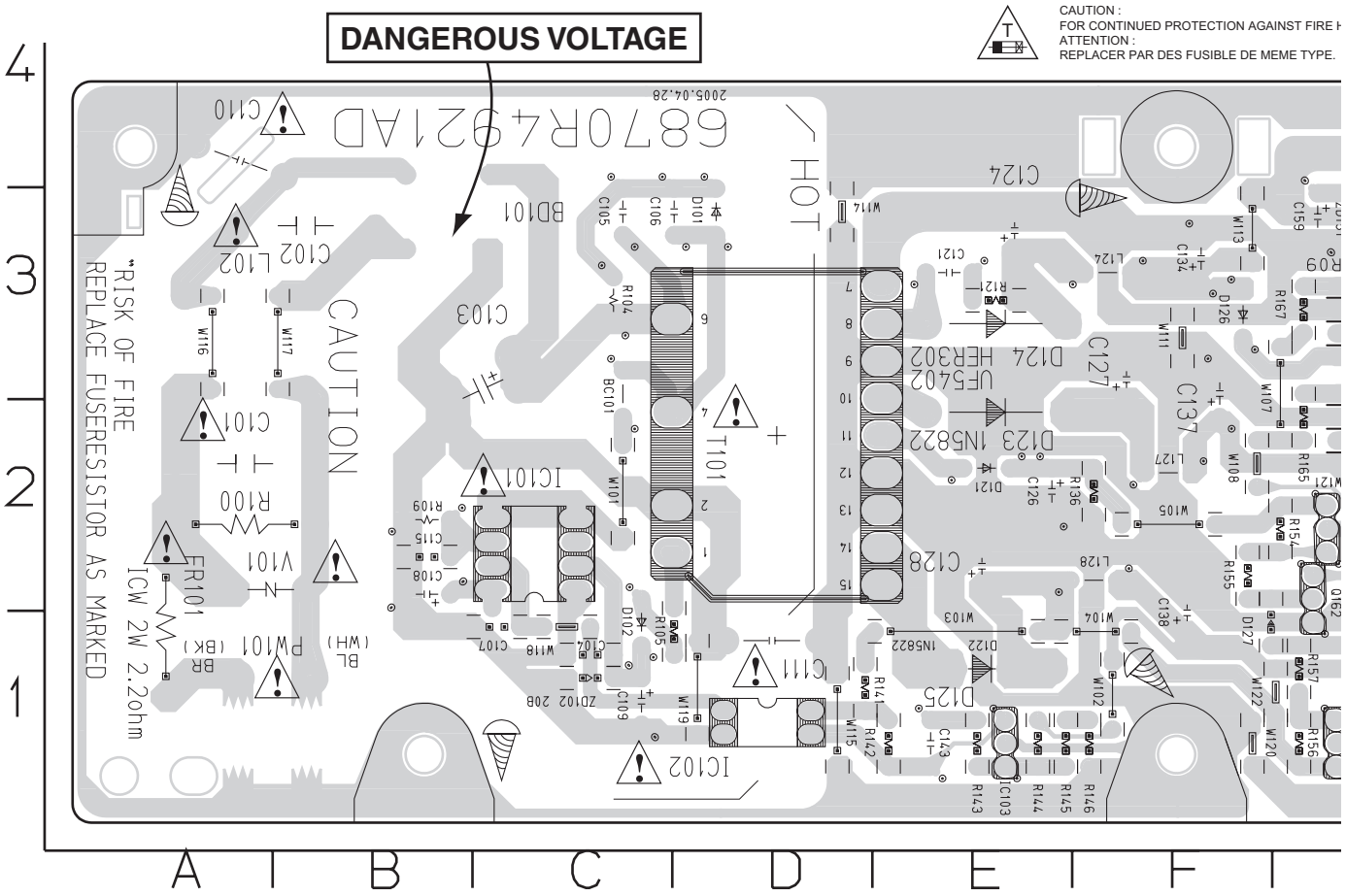




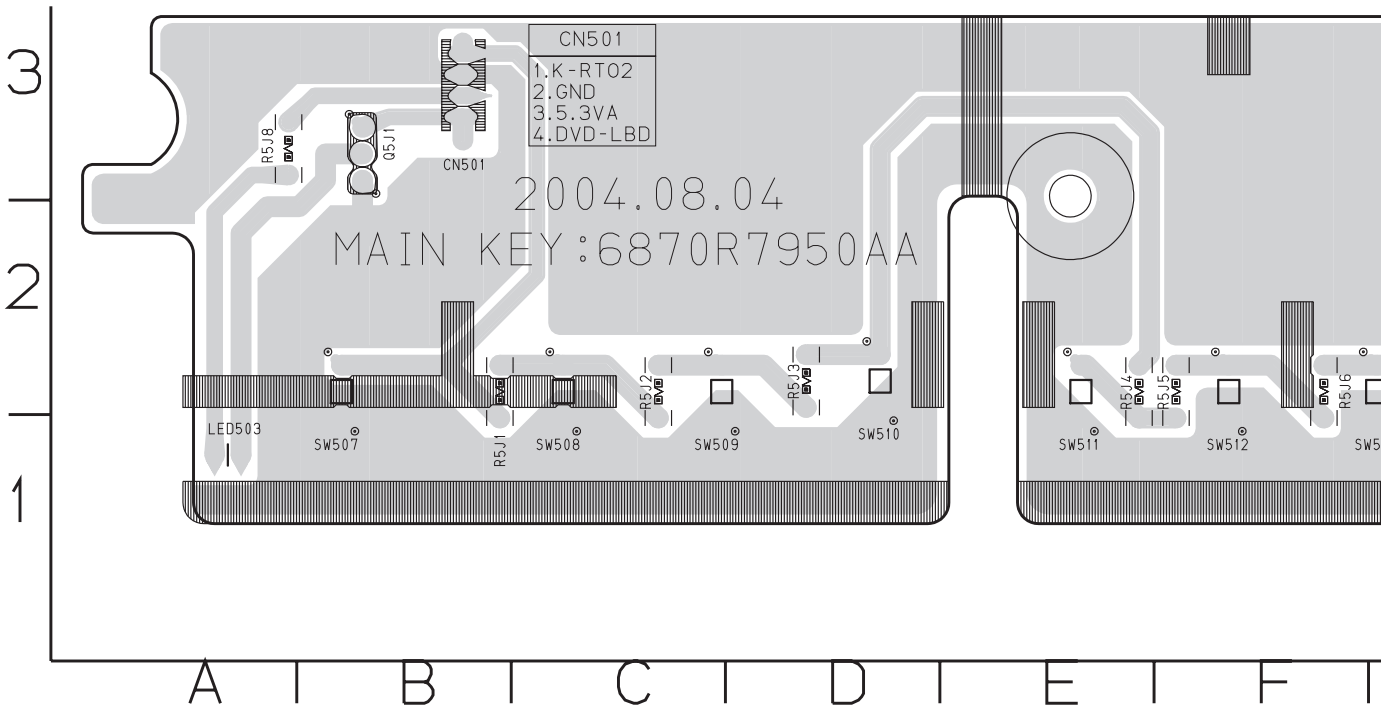
LOCATION GUIDE

IC301	H8
IC501	D4
PIN0028	G8
PIN0031	G9
PIN0057	I9
PIN0208	F8
PM14	J6
REC±BIAS±TP	F9
REC±H±TP	G10
TP01	I4
TP02	J4
TP03	J4
TP04	J4
TP05	J4
TP06	J4
TP07	J4
TP08	J4
TP09	J4
TP10	J4
TP11	J4
TP12	J4
TP13	J4
TP14	J4
TP15	J4
TP16	J4
TP17	I4
TP18	I4
TP19	J4
TP20	J4
TP201	L4
TP21	H4
TP22	I4
TP23	I4
TP24	H4
TP25	H4
TP30	I4
TP32	I4
TP33	I4
TP35	I4
TP37	I4
TP40	H4
TPSCL	J7
TPSOA	J7

■ Power board <01>

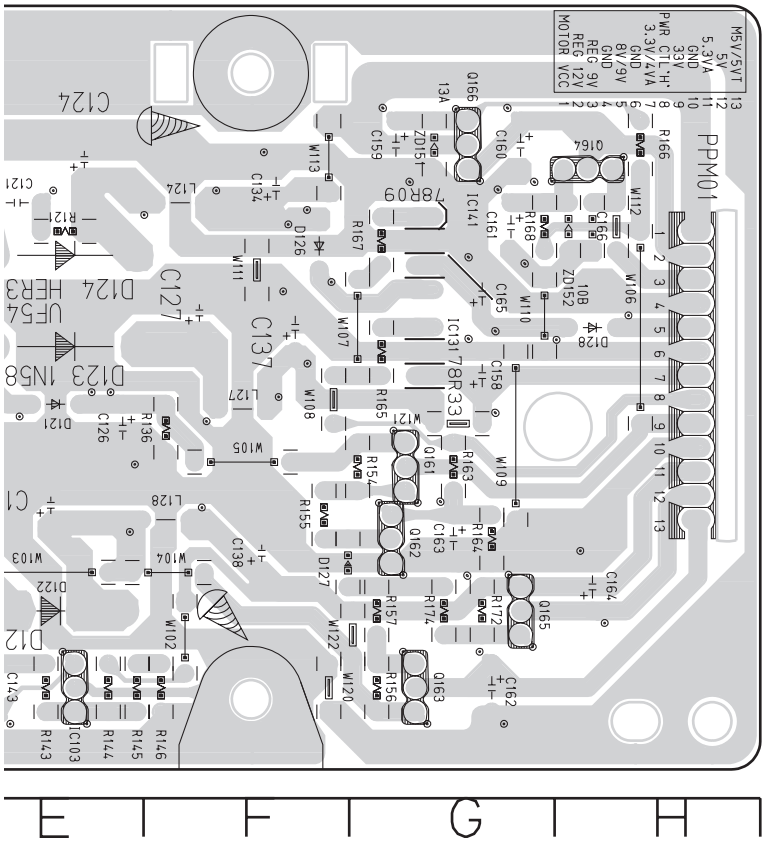


■ Key board <02>



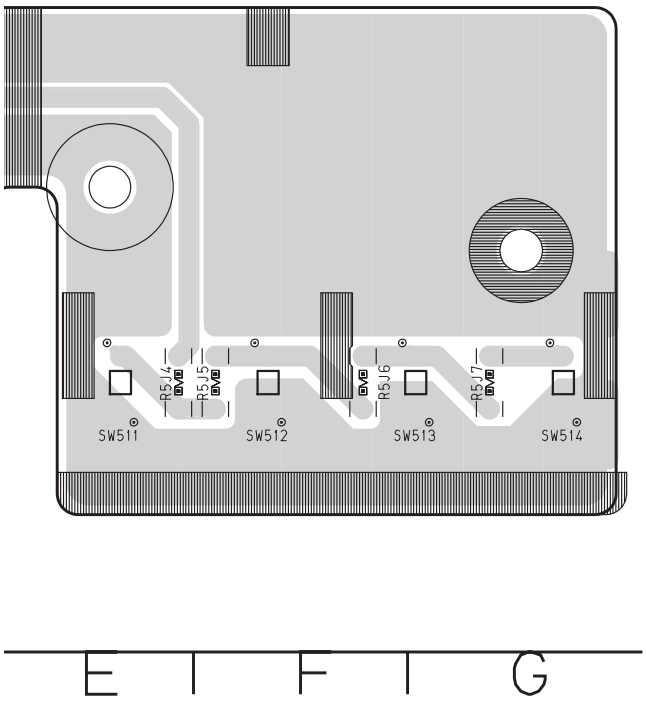
CAUTION :
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE AND RATED FUSE(S).
ATTENTION :
REPLACER PAR DES FUSIBLE DE MEME TYPE.

LOCATION GUIDE



BC101	C3	C158	G2	IC103	E1	R143	E1
BD101	B3	C159	G3	IC131	G2	R144	E1
C101	A2	C160	G3	IC141	G3	R145	E1
C102	B3	C161	G3	L102	A3	R146	F1
C103	C3	C162	G1	L124	F3	R154	G2
C104	C1	C163	G2	L127	F2	R155	F2
C105	C3	C164	H1	L128	F2	R156	G1
C106	D3	C165	G3	PPM01	H3	R157	G1
C107	C1	C166	H3	PW101	B1	R163	G2
C108	B2	D101	D3	Q161	G2	R164	G2
C109	C1	D102	C1	Q162	G2	R165	G2
C110	A4	D121	E2	Q163	G1	R166	H3
C111	D1	D122	E1	Q164	H3	R167	G3
C115	B2	D123	E2	Q165	G1	R168	G3
C121	E3	D124	E3	Q166	G3	R172	G1
C124	E3	D125	E1	R100	A2	R174	G1
C126	E2	D126	F3	R104	C3	T101	D2
C127	F3	D127	F1	R105	D1	V101	A2
C128	E2	D128	H3	R109	B2	ZD102	C1
C134	F3	FR101	A1	R121	E3	ZD151	G3
C137	F3	IC101	C2	R136	F2	ZD152	H3
C138	F1	IC102	D1	R141	D1		
C143	E1			R142	E1		

NOTES) ⚠ Warning
Parts that are shaded are critical
With respect to risk of fire or
electricial shock.



LOCATION GUIDE

CN501	B3	SW507	B2
LED503	A1	SW508	C2
Q5J1	B3	SW509	C2
R5J1	B2	SW510	D2
R5J2	C2	SW511	E2
R5J3	D2	SW512	F2
R5J4	E2	SW513	G2
R5J5	F2	SW514	G2
R5J6	F2		
R5J7	G2		
R5J8	A3		

■ Voltage charts

MODE / PIN NO.	EE	PB
IC201		
1	1.6	1.58
2	4.3	2.6
3	4.3	2.6
4	1.62	1.6
5	1.66	1.6
6	2.15	1.6
7	4.3	2.7
8	5.2	5.1
9	5.2	5.1
10	0.01	0.01
11	4.4	2.5
12	4.4	2.6
13	4.3	2.7
14	4.3	2.39
15	4.3	2.67
16	4.3	2.5
17	1.6	3.4
18	1.6	1.8
19	0.01	0.01
20	4.3	2.58
21	5.2	5.18
22	0.01	0.01
23	1.6	1.88
24	4.3	2.58
25	4.3	2.58
26	1.6	1.61
27	1.6	1.61
28	0.01	3.25
IC301		
1	2.34	2.3
2	2.3	2.3
3	2.3	2.3
4	2.3	2.3
5	2.3	2.3
6	2.3	2.3
7	0.2	0.2
8	2.34	2.3
9	2.34	2.3
10	2.28	2.3
11	4.98	4.97
12	0.99	0.99
13	0.94	0.94
14	2.0	2
15	1.51	1.61
16	0	0
17	2.4	2.47
18	2.4	1.47
19	0	0.02
20	2.52	2.2
21	1.77	1.46
22	3.1	3
23	5.01	5
24	0.03	0.03
25	0.3	0.35
26	2.1	2.1
27	1.48	1.59
28	2.27	2.27
29	2.27	2.27
30	2.27	2.27
31	4.02	4.02
32	2.27	2.27
33	2.70	2.74
34	2.99	2.95
35	3.08	3.08
36	2.41	2.43
37	2.56	2.53
38	0	0
39	1.63	1.64
40	0	0
41	0.85	0.85
42	2.16	2.15
43	0.00	0
44	4.98	4.57
45	4.98	4.97
46	2.53	3.28
47	3.53	3.13
48	3.54	3.54
49	3.96	3.96
50	2.53	2.53
51	2.12	2.12
52	5.02	5
53	4.53	4.53
54	4.45	4.2
55	0.90	1
56	0.00	0
57	1.68	2.59
58	0.00	0
59	1.00	2.95
60	1.80	0.3
61	1.95	1.94
62	0.00	0
63	4.00	4
64	1.75	1.95
65	1.95	0.7
66	1.95	0.72
67	1.95	0.72
68	5.00	4.99
69	0.10	0
70	0.10	0
71	0.00	0
72	1.93	1.9
73	1.93	1.93
74	1.93	1.93
75	0.00	0
76	2.33	2.32
77	5.02	5
78	2.33	2.32
79	0.00	0
80	2.33	2.32
IC302		
1	1.28	1.28
2	0.01	0.01
3	1.32	1.32
4	0.03	0.05
5	0.04	0.05
6	5.03	5.03
7	1.32	1.32
8	0.01	0.06
IC401		
1	1.63	1.62
2	0.002	1.08
3	1.64	1.64
4	0.002	0.002
5	0.02	0.01
6	4.92	4.9
7	2.48	2.47
8	2.48	2.48
9	0.002	0.002
10	2.45	2.44
11	4.9	0.008
12	4.9	0.008
13	3.1	0.04
14	3.28	3.28
15	3.28	3.28
16	1.44	1.45
IC402		
1	5.51	5.52
2	5.52	5.52
3	5.51	5.47
4	12.12	0.0002
5	5.51	5.52
6	5.52	5.52
7	5.52	5.52
8	0.002	12.13
IC501		
1	1.17	0.07
2	5.22	5.21
3	5.22	5.22
4	0.01	0.01
5	1.78	0.64
6	1.8	0.56
7	1.78	1.7
8	0.17	0.16
9	0.48	3.26
10	0.3	1.1
11	0.03	3.46
12	0.03	0.01
13	1.88	0.03
14	4.8	4.84
15	0.018	2.59
16	0.017	0.01
17	1.33	1.4
18	5.17	2.59
19	5.16	2.59
20	1.38	0.02
21	0.01	0.02
22	0.002	5.22
23	0.002	5.22
24	5.23	5.22
25	5.2	0.002
26	5.18	5.16
27	5.17	5.17
28	5.18	5.16
29	5.18	5.17
30	5.18	5.16
31	5.18	0.01
32	0	0.01
33	0	0.01
34	1.1	5.19
35	1.75	1.37
36	1.47	5.19
37	5.2	5.19
38	2.25	1.1
39	2.33	2.33
40	0	0
41	2.19	1.2
42	2.16	1.23
43	0.02	0.02
44	2.43	2.42
45	2.44	2.44
46	0.01	0
47	1.43	1.43
48	0	0
49	0	0
50	1.3	2.1
51	2.05	1.8
52	1.73	2.2
53	5.06	5
54	2.94	2.6
55	0.04	1.6
56	1.19	2
57	0	0
58	1.02	1.9
59	0.018	0.2
60	2.62	2.4
61	4.28	4.2
62	0.01	0
63	0.01	0
64	0.01	0
65	1.21	1.2
66	3.26	3.26
67	3.26	3.26
68	4.57	4
69	4.58	0.8
70	4.57	4.4
71	0.08	0.1
72	5.22	0.01
73	0.009	0.01
74	0.01	0.01
75	0.009	0.008
76	0.008	2.6
77	0.008	2.6
78	4.8	4.8
79	0.56	1.5
80	5.02	3.9
81	0.64	0.07
82	4.04	4.01
83	4.86	4.87
84	4.89	0.009
85	0.82	0.82
86	2	1.8
87	2.6	2.39
88	0.01	0.01
89	2	1.5
90	1	1.38
91	2.62	2.56
92	2.62	2.56
93	1.33	1.2
94	2.59	2.52
95	2.59	2.52
96	2.62	2.55
97	0.29	2.55
98	5.21	5.12
99	5.23	5.2
100	1.48	1.41
IC5F1		
1	2.1	2.2
2	4.7	4.77
3	4.7	4.7
4	5	5
5	4.4	4.4
6	2.6	2.6
7	2.5	2.55
8	2.24	2.5
9	2.5	2.5
10	2.3	2
11	2	2.3
12	2.2	1.6
13	0.87	0.85
14	2.28	1.9
15	2.33	2.18
16	2	2.1
17	2	2.2
18	4.43	4.4
19	0.01	0.002
20	2	2
21	1.9	2
22	1.9	2.1
23	2	2.1
24	0.01	0.003
IC601		
1	0.01	1.7
2	3.29	3.26
3	3.29	3.27
4	0.08	0.4
5	0.05	0.4
6	0.05	0.3
7	1.72	1.9
8	1.72	0.8

MODE / PIN NO.	EE	PB
9	2.78	0.5
10	1.72	0.7
11	0.01	1.6
12	0.01	0.01
13	3.44	3.28
14	0.01	2.1
15	3.43	3.1
16	1.7	2.7
17	3.31	3.1
18	1.7	2.2
19	0.7	1
20	0.01	0.01
21	3.39	3.24
22	2.6	2.9
23	3.39	3.25
24	2.4	2.5
25	1.86	1.9
26	1	1.63
27	2.5	1.08
28	0.01	0.01
29	0.01	0.01
30	2.7	1.22
31	0.01	0.05
32	0.01	0.01
33	2.7	3.2
34	3.28	3.24
35	0.4	1.13
36	1.7	1.5
37	2	2.5
38	1.7	3.9
39	0.01	1.2
40	1.7	1.5
41	3.4	3.28
42	0.01	1.5
43	1.7	2.7
44	1.8	3.19
45	1.7	1.6
46	1.7	1.5
47	3.4	3.28
48	1.68	3.04
49	1.68	3.03
50	0.01	0.01
51	3.39	3.27
52	3.39	3.29
53	1.63	1
54	0.13	0.5
55	0.13	1.26
56	0.12	0.5
57	1.64	1
58	3.39	3.28
59	0.12	0.4
60	1.64	1.5
61	0.12	0.4
62	0.01	0.01
63	0.01	0.4
64	1.85	1.8

MODE / PIN NO.	EE	PB
65	1.38	0.03
66	0.01	0.01
67	0.03	0.34
68	3.39	3.28
69	0.01	0.01
70	3.36	3.22
71	0.09	0.37
72	0.01	0.01
73	0.01	3.23
74	3.37	3.25
75	3.38	3.28
76	3.39	3.28
77	3.38	3.17
78	0.01	0.02
79	0.01	0.01
80	1.6	1.49
81	3.39	3.27
82	1.59	1.91
83	0.01	0.01
84	1.4	1.25
85	1.8	1.5
86	1.6	1
87	3.39	3.28
88	1.6	1.3
89	1.8	2
90	1.7	1.5
91	0.01	0.01
92	1.7	1.89
93	0.01	1.8
94	1.3	1.99
95	0.01	0.01
96	1.7	2.2
97	3.39	3.28
98	1.7	1.85
99	1.8	1.3
100	1.6	1.52
101	0.01	0.01
102	1.6	1.81
103	1.6	1.9
104	1.6	1.7
105	3.39	3.28
106	0.01	0.01
107	0.01	0.01
108	0.01	0.01
109	0.01	0.01
110	1.68	1.61
111	0.02	0.01
112	0.02	0.01
113	0.01	1.07
114	0.01	0.01
115	1.69	1.64
116	1.69	1.61
117	0.01	0.01
118	1.65	1.5
119	3.39	3.25
120	0.01	0.01

MODE / PIN NO.	EE	PB
121	0.01	0.01
122	0.01	0.01
123	0.01	0.01
124	1.7	1.64
125	3.39	3.28
126	0.01	0.01
127	0.07	3.25
128	0.01	0.01
129	0.01	0.01
130	0.01	0.01
131	1.85	2.44
132	3.37	0.06
133	3.38	3.28
134	3.38	3.28
135	3.03	0.01
136	0.03	0.01
137	0.01	3.25
138	3.39	3.28
139	0.01	0.01
140	0.01	0.01
141	3.29	3.27
142	1.86	2.45
143	1.66	2.46
144	1.66	2.34
145	0.01	0.01
146	0.01	0.01
147	0.75	1.29
148	0.01	0.01
149	3.37	3.26
150	0.98	1.13
151	0.98	1.13
152	3.36	3.26
153	1.28	1.82
154	1.28	1.81
155	0.01	0.01
156	0.01	0.01
157	1.65	1.31
158	1.65	1.31
159	3.25	3.25
160	2.64	3.23
161	3.25	3.2
162	2.64	3.21
163	3.25	3.21
164	3.25	3.2
165	2.64	3.21
166	0.01	0.01
167	2.64	3.14
168	1.88	2.24
169	0.01	0.01
170	2.64	2.1
171	1.88	2.4
172	2	2.1
173	1.8	2.1
174	1.74	1.91
175	1.71	1.88
176	0.11	0.16

MODE / PIN NO.	EE	PB
177	0.1	0.38
178	3.15	3.1
179	3.13	2.25
180	0.01	0.01
181	0.01	0.01
182	1.8	2.1
183	0.01	3.24
184	0.01	0.01
185	0.01	0.2
186	3.29	3.28
187	3.28	3.28
188	0.01	0.02
189	0.01	0.01
190	0.1	0.1
191	1.2	1.4
192	3.3	3.28
193	0.01	0.01
194	0.01	0.01
195	1.7	1.58
196	1.8	1.6
197	0.01	0.01
198	1.4	2.41
199	3.3	3.28
200	0.01	0.01
201	0.01	0.01
202	1.51	1.52
203	3.9	2.9
204	3.3	3.28
205	0.01	3.28
206	3.24	3.28
207	3.25	3.27
208	3.24	0.39
IC602		
1	3.28	3.27
2	1.86	1.2
3	1.87	1.5
4	0	0.01
5	1.58	1.1
6	1.8	1.5
7	3.28	3.27
8	1.5	1.8
9	1.78	1.2
10	0.01	0.01
11	2.17	1.3
12	0.28	0.5
13	3.28	3.27
14	0.01	0.01
15	3.27	3.16
16	3.27	0.2
17	3.26	3.24
18	3.25	3.21
19	0.14	0.5
20	1.56	2.1
21	0.12	0.3
22	0.12	0.29
23	0.01	0.37

MODE / PIN NO.	EE	PB
24	0	0.4
25	3.31	3.2
26	0.01	0.01
27	1.59	101
28	0.11	1.1
29	1.62	1.1
30	0.01	1.1
31	0.19	0.02
32	0.01	0.2
33	0.01	0.02
34	3.36	3.2
35	1.56	1.52
36	0.01	0.01
37	0.01	0.02
38	3.38	3.28
39	1.56	1.8
40	1.75	1.17
41	0.01	0.002
42	1.62	1.17
43	1.42	1.1
44	3.41	3.28
45	1.31	1.9
46	1.78	1.8
47	0	0.001
48	1.55	1.7
49	0.54	1.1
50	0.01	0.001
IC604		
1	0.01	1.7
2	0.01	1.2
3	0.01	0.01
4	0.01	1.8
5	0.01	0.5
6	3.29	3.2
7	0.01	3.2
8	3.29	3.2
9	0.01	0.003
10	0	0.27
11	3.2	3.2
12	3.2	3.2
13	3.2	3.2
14	3.2	3.2
15	1.25	2.1
16	0.01	0.002
17	0.02	3.2
18	0.003	3.2
19	0.002	3.2
20	3.29	3.2
21	3.29	0.002
22	3.29	0.002
23	3.29	3.2
24	3.25	3.2
25	3.25	3.2
26	3.29	3.2
27	0.01	0.002
28	3.2	3.2

MODE / PIN NO.	EE	PB
29	2.9	2.9
30	2.9	2.9
31	2.8	2.9
32	2.8	1.2
33	2.8	1.2
34	2.8	2.8
35	2.86	2.8
36	0.01	0.01
37	3.29	3.28
38	2.9	0.68
39	2.9	2.9
40	2.84	2.9
41	2.86	2.9
42	2.85	3.28
43	2.88	2.9
44	2.85	2.87
45	2.85	2.87
46	0.01	0.01
47	3.29	3.28
48	0.002	3.28
IC605		
1	0.001	0.001
2	0.001	0.001
3	0.001	0.001
4	0.001	0.001
5	3.27	0.04
6	3.28	3.28
7	0.001	0.001
8	3.29	3.28
IC801		
1	0.002	0.002
2	2.59	2.58
3	9.3	9.29
4	2.5	2.5
5	5.24	5.24
6	1.89	1.9
7	0.005	0.004
8	0.56	0.005
9	0.005	0.005
10	0.001	0.001
11	0.006	0.006
12	2.53	2.53
13	1.92	1.93
14	2.53	2.5
15	5.14	5.14
16	2.55	2.55
17	0.01	0.01
18	0.47	0.47
19	2.57	2.57
20	2.58	2.58
21	2.56	2.56
22	2.55	2.55
23	0.15	0.15
24	2.26	2.26
25	0.001	0.001
26	2.26	2.26

MODE / PIN NO.	EE	PB
27	2.26	2.26
28	0.002	0.002
29	3.3	3.3
30	0.003	0.003
31	2.55	2.55
32	5.1	5.1
33	2.69	2.69
34	2.69	2.69
35	0.002	0.001
36	5.14	5.14
37	5.2	5.2
38	5.2	5.2
39	5.18	5.1
40	1	0.9
41	2.56	2.56
42	2.55	2.55
43	2.57	2.57
44	2.56	2.56
45	0.47	0.47
46	5.14	5.13
47	2.53	2.53
48	1.95	1.96
49	0.02	0.02
50	0.001	0.001
51	2	2
52	1.22	1.2
53	3.8	3.87
54	9.3	9.3
55	3.87	3.8
56	2	2
57	2.1	2.1
58	4.5	4.5
59	2.46	2.46
60	3.87	3.87
61	3.18	3.1
62	3.8	3.7
63	3.8	3.8
64	2.47	2.46
65	3.87	3.87
66	4.1	4.1
67	3.8	3.8
68	3.9	3.9
69	0.005	0.005
70	0.001	0.001
71	0.006	0.007
72	3.84	3.84
73	0.007	0.007
74	2.53	2.53
75	3.88	3.88
76	3.19	3.19
77	0.004	0.003
78	4.29	4.29
79	0.001	0.001
80	4.31	4.31

Transistor	STOP		PLAY	
	+	-	+ -	
C201	5.14	0	5.15	0
C208	3.26	3.12	3.24	2.29
C209	3.26	3.12	3.24	3.11
C214	5.26	0	5.2	0
C221	0	2.11	0	2.11
C310	0.00	0.00	0.00	0.00
C311	2.34	0.38	2.32	0.00
C312	2.34	0.00	2.32	0.00
C315	2.35	0.00	2.33	0.00
C318	2.30	0.00	2.30	0.00
C319	1.54	0.00	1.63	0.00
C324	3.04	1.74	3.00	1.46
C325	5.04	0.00	5.00	0.00
C327	1.45	0.00	1.59	0.00
C328	2.28	0.00	2.28	0.00
C329	2.27	0.49	2.27	0.53
C330	4.02	0.00	4.02	0.00
C331	2.57	1.74	2.27	1.74
C332	2.64	0.00	2.73	0.00
C333	2.95	2.20	2.96	2.25
C334	3.07	0.00	3.08	0.00
C335	2.53	0.01	2.42	0.00
C339	4.90	0.00	4.96	0.00
C362	0.00	0.00	0.00	0.00
C363	0.16	0.00	0.12	0.00
C367	2.27	1.78	2.27	1.33
C402	4.69	0	4.92	0
C405	2.35	0	2.45	0
C406	5.47	2.37	5.44	2.48
C407	5.47	0	5.44	0
C408	5.47	2.37	5.44	2.48
C413	11.9	0	12	0
C414	5.17	0.01	5.44	0
C415	5.47	0.01	5.44	0
C500	5.2	0	5.19	0
C503	5.04	0	5.04	0
C516	4.83	0	4.82	0
C526	13.89	0	13.8	0
C531	3.26	2.1	3.39	2.2
C534	4.38	0	4.38	0
C535	4.4	0	4.4	0
C546	13.95	0	14	0
C561	5.22	0	5.19	0
C578	2.6	0	2.59	0
C579	2.6	0	2.59	0
C584	2.6	0	2.59	0.01
C586	5.21	0	5.17	0
C592	5.21	0	5.18	0
C5G1	4.7	0	4.43	0
C612	3.26	0	3.25	0
C614	3.23	0	3.22	0
C616	3.24	0	3.23	0
C618	1.8	0	1.8	0
C642	1.81	0	1.81	0
C643	3.26	0	3.25	0
C646	3.26	0	3.25	0

Transistor	STOP		PLAY	
	+	-	+ -	
C673	3.26	0	3.25	0
C701	16	0	16	0
C702	4.98	0	4.97	0
C702	4.99	0.00		
C710	32.00	0.00		
C712			5.79	0
C712	5.78	0.00		
C801	4.3	0.01	4.29	0
C806	3.82	0	3.82	0
C807	3.85	0	3.85	0
C808	3.16	0	3.15	0
C816	2.53	0	2.54	0
C821	9.3	0	9.3	0
C826	0.26	0	0.61	0
C828	5.15	0	5.14	0
C829	2.55	0	2.55	0
C830	0.47	0	0.47	0
C831	2.57	0	2.57	0
C840	5.1	0	5.11	0
C842	5.1	0	5.15	0
C843	2.56	0	2.54	0
C846	2.58	0	2.54	0
C847	0.47	0	0.47	0
C851	4.28	0.02	4.2	0.1
C866	2.53	0	2.52	0
C871	2.59		2.59	0
C873	1.22	0	1.22	0
C876	3.84	0	3.84	0
C877	2.05	0	2.05	0
C879	4.54	0	4.53	0
C880	2.44	0	2.49	0
C881	3.85	0	3.84	0
C882	9.3	0	9.3	0
C883	3.18	0	3.15	0
C886	3.84	0	3.84	0
C887	4.07	0	4.08	0
C888	3.86	0	3.85	0
C889	3.9	0	3.92	0
C902	1.12	1	1.12	1
C902	1.10	0.91		
C903	0.9	0.78	0.94	0.77
C904	1.4	1.28	1.41	1.28
C904	1.23	1.13		
C911	2.4	0	2.68	0
C911	2.91	0.00		
C916	5.11	0	5.12	0

STOP		PLAY	
+	-	+ -	
5.14	0	5.15	0
3.26	3.12	3.24	2.29
3.26	3.12	3.24	3.11
5.26	0	5.2	0
0	2.11	0	2.11
0.00	0.00	0.00	0.00
2.34	0.38	2.32	0.00
2.34	0.00	2.32	0.00
2.35	0.00	2.33	0.00
2.30	0.00	2.30	0.00
1.54	0.00	1.63	0.00
3.04	1.74	3.00	1.46
5.04	0.00	5.00	0.00
1.45	0.00	1.59	0.00
2.28	0.00	2.28	0.00
2.27	0.49	2.27	0.53
4.02	0.00	4.02	0.00
2.57	1.74	2.27	1.74
2.64	0.00	2.73	0.00
2.95	2.20	2.96	2.25
3.07	0.00	3.08	0.00
2.53	0.01	2.42	0.00
4.90	0.00	4.96	0.00
0.00	0.00	0.00	0.00
0.16	0.00	0.12	0.00
2.27	1.78	2.27	1.33
4.69	0	4.92	0
2.35	0	2.45	0
5.47	2.37	5.44	2.48
5.47	0	5.44	0
5.47	2.37	5.44	2.48
11.9	0	12	0
5.17	0.01	5.44	0
5.47	0.01	5.44	0
5.2	0	5.19	0
5.04	0	5.04	0
4.83	0	4.82	0
3.89	0	13.8	0
3.26	2.1	3.39	2.2
4.38	0	4.38	0
4.4	0	4.4	0
3.95	0	14	0
5.22	0	5.19	0
2.6	0	2.59	0
2.6	0	2.59	0
2.6	0	2.59	0.01
5.21	0	5.17	0
5.21	0	5.18	0
4.7	0	4.43	0
3.26	0	3.25	0
3.23	0	3.22	0
3.24	0	3.23	0
1.8	0	1.8	0
1.81	0	1.81	0
3.26	0	3.25	0
3.26	0	3.25	0

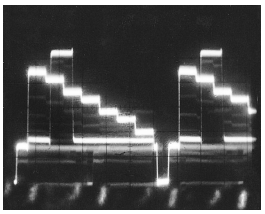
Tran-sistor	STOP		PLAY	
	+	-	+ -	
C673	3.26	0	3.25	0
C701	16	0	16	0
C702	4.98	0	4.97	0
C702	4.99	0.00		
C710	32.00	0.00		
C712			5.79	0
C712	5.78	0.00		
C801	4.3	0.01	4.29	0
C806	3.82	0	3.82	0
C807	3.85	0	3.85	0
C808	3.16	0	3.15	0
C816	2.53	0	2.54	0
C821	9.3	0	9.3	0
C826	0.26	0	0.61	0
C828	5.15	0	5.14	0
C829	2.55	0	2.55	0
C830	0.47	0	0.47	0
C831	2.57	0	2.57	0
C840	5.1	0	5.11	0
C842	5.1	0	5.15	0
C843	2.56	0	2.54	0
C846	2.58	0	2.54	0
C847	0.47	0	0.47	0
C851	4.28	0.02	4.2	0.1
C866	2.53	0	2.52	0
C871	2.59		2.59	0
C873	1.22	0	1.22	0
C876	3.84	0	3.84	0
C877	2.05	0	2.05	0
C879	4.54	0	4.53	0
C880	2.44	0	2.49	0
C881	3.85	0	3.84	0
C882	9.3	0	9.3	0
C883	3.18	0	3.15	0
C886	3.84	0	3.84	0
C887	4.07	0	4.08	0
C888	3.86	0	3.85	0
C889	3.9	0	3.92	0
C902	1.12	1	1.12	1
C902	1.10	0.91		
C903	0.9	0.78	0.94	0.77
C904	1.4	1.28	1.41	1.28
C904	1.23	1.13		
C911	2.4	0	2.68	0
C911	2.91	0.00		
C916	5.11	0	5.12	0

Tran-sistor	STOP			PLAY		
	Base	Emitter	Collector	Base	Emitter	Collector
Q201	3.1	3.28	0.009	2.28	3.05	2.34
Q202	3.14	3.28	0.01	3.1	3.25	0.6
Q203	4.9	0.01	4.9	4.86	5.1	4.85
Q204	4.9	0.04	4.9	4.86	5.2	4.86
Q205	0.003	0.002	4.9	0.003	0.003	4.8
Q206	0.003	0.002	4.9	0.003	0.016	4.86
Q301	4.4	5.08	4.98	4.4	5.08	4.98
Q302	0.74	0.006	0.001	0.74	0.006	0.001
Q303	0.72	0.006	0.008	0.72	0.006	0.008
Q305	5.00	4.99	0.00	3.17	3.85	3.76
Q306	1.63	2.22	0.01	1.63	2.22	0.01
Q307	2.15	1.48	0.001	2.15	1.48	0.001
Q308	0.01	4.99	5.24	4.51	3.85	5.23
Q311	0.00	0.00	0.00	-2.20	0.24	3.51
Q403	0.002	1.55	0.76	0.002	0.009	-0.4
Q404	0.002	1.6	0.76	0.002	0.009	-0.6
Q405	2.54	3.27	3.25	3.23	3.26	-0.4
Q501	0.009	0.002	0.02	0.009	0.002	0.02
Q504	2.15	2.83	0.002	2.15	2.83	0.002
Q505	1.63	1.65	5.15	1.63	1.65	5.15
Q507	2.15	2.8	0.002	2.15	2.8	0.002
Q550	0.01	0.002	1.66	0.01	0.002	1.66
Q901	0.76	0.002	0.008	-0.48	0.002	0.004
Q902	0.76	0.002	0.008	0	0.002	0.009
Q903	0.002	0.001	5.14	0.002	0.001	5.14
Q701	5.78	5.03	5.24			

Waveforms

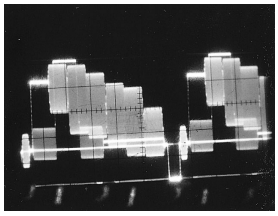
* IC301 Waveform

①



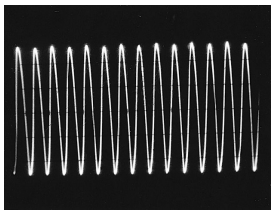
IC301 Pins 20, 21, 22
100mV/10msec DIV
VV/EE
20 Main DE Emphasis Filter
21 Main DE Emphasis out
22 Clamp in

②



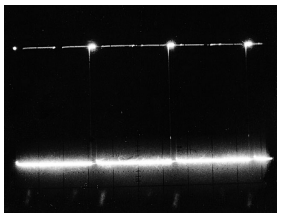
IC301 Pin 32
200mV/10msec DIV
EE
(VIDEO IN)

③



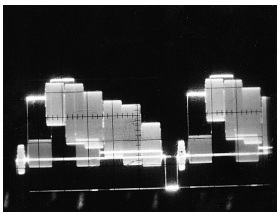
IC301 Pin 41
100mV/0.2msec DIV
REC/PB
(2fsc)

④



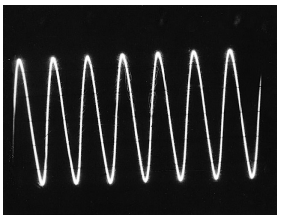
IC301 Pin 25
1.0V/20msec DIV
VV/EE
(C-SYNC OUT)

⑤



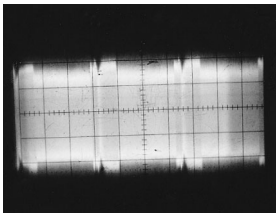
IC301 Pin 26
500mV/10msec DIV
VV/EE
(VIDEO OUT)

⑥



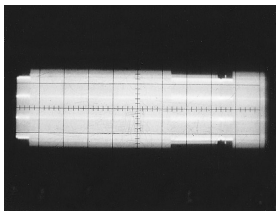
IC301 Pin 49
100mV/0.2msec DIV
PB/REC
(3.58MHz X-TAL IN)

⑦



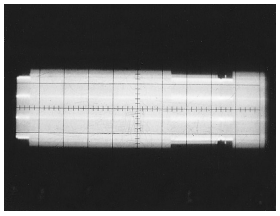
IC301 Pin 14
100mV/5msec DIV
PB
(PB RF out)

⑧



IC301 Pin 73
500mV/2msec DIV
SP REC
(REC RF)

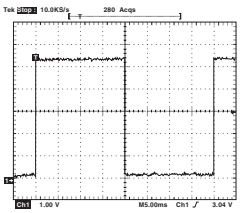
⑨



IC301 Pin 66
500mV/2msec DIV
EP REC
(REC RF)

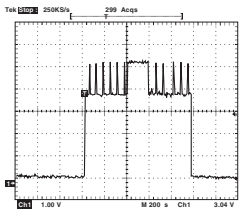
* IC501 Waveform

①



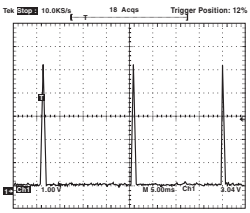
IC501 Pin 18
REC/PB

②



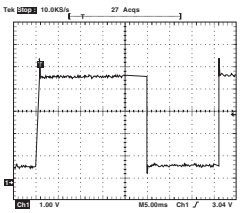
IC501 Pin 13
QUE/REV

③



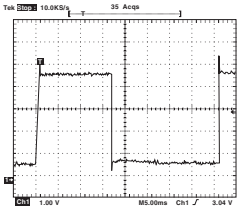
IC501 Pin 13
QUE/REV

④



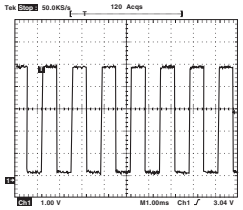
IC501 Pin 95
REC

⑤



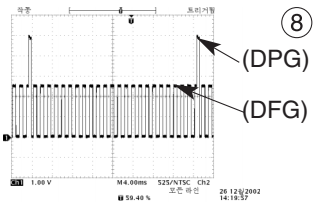
IC501 Pin 94
REC

⑥



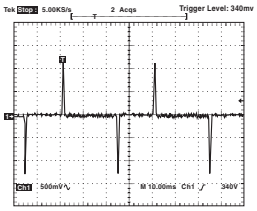
IC501 Pin 87
REC/PB

⑦



IC501 Pin 90
REC/PB
(DPG/DFG)

⑧



IC501 Pin 97
PB
(CTL OUT)

JVC

Victor Company of Japan, Limited
DIGITAL VIDEO STORAGE CATEGORY 12, 3-chome, Moriya-cho, kanagawa-ku, Yokohama, kanagawa-prefecture, 221-8528, Japan

No.YD093SCH

Printed in Japan
VPT

PARTS LIST

[HR-XVC16BUS,HR-XVC16BUC, HR-XVC17SUS,HR-XVC17SUC]

* SAFETY PRECAUTION
  Parts identified by the ⚠ symbol are critical for safety. Replace only with specified part numbers.
* BEWARE OF BOGUS PARTS
  Parts that do not meet specifications may cause trouble in regard to safety and performance. We recommend that genuine JVC parts be used.
* (x_) in a description column shows the number of the used part.

Area Suffix	
US	U.S.A.
UC	Canada

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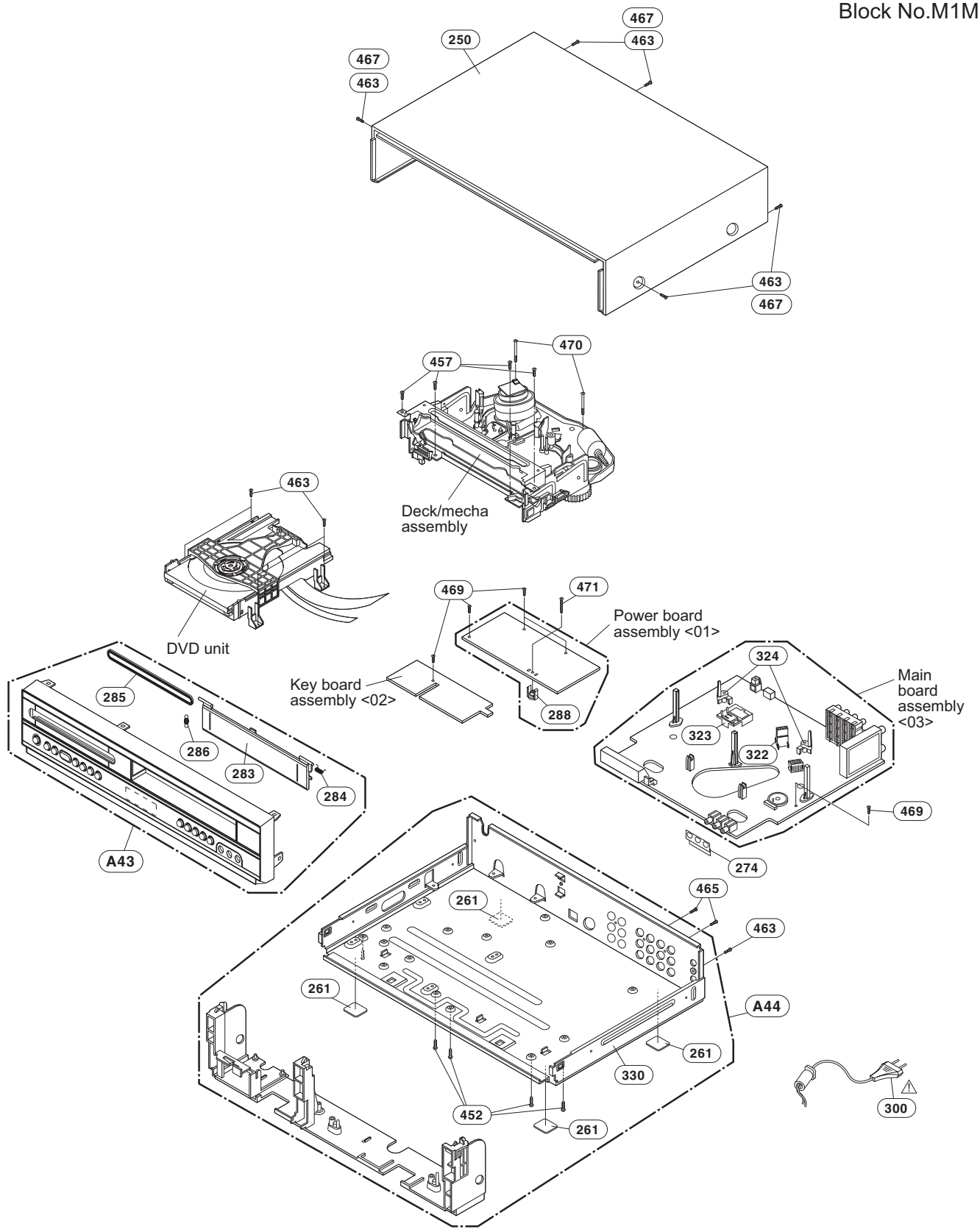
VHS mechanism assembly and parts list ---------- 3-4
DVD mechanism assembly and parts list ---------- 3-7
Electrical parts list ---------- 3-9
Packing materials and accessories parts list ---------- 3-15

Exploded view of general assembly and parts list

Block No.M1MM



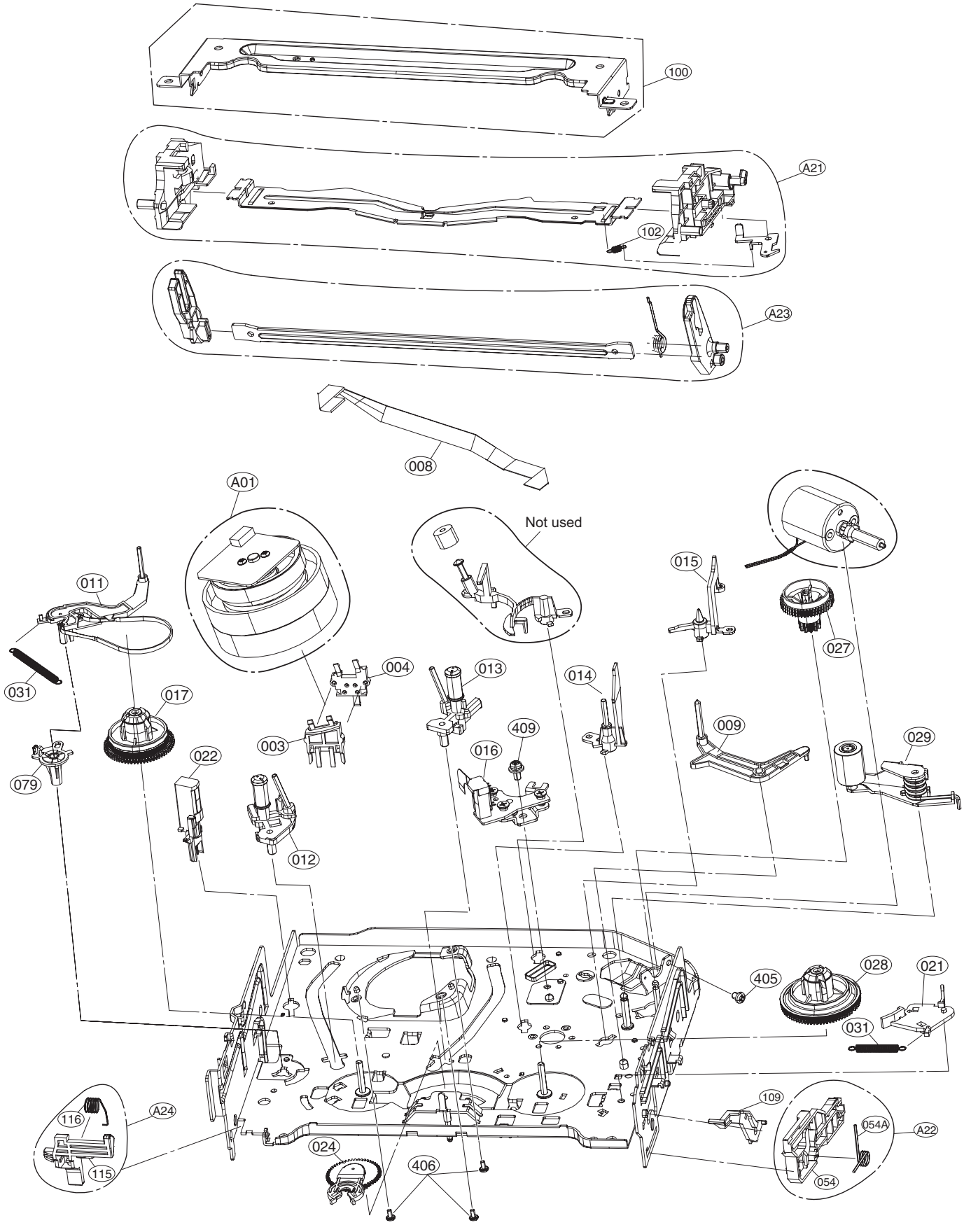
General assembly

Block No. [M][1][M][M]

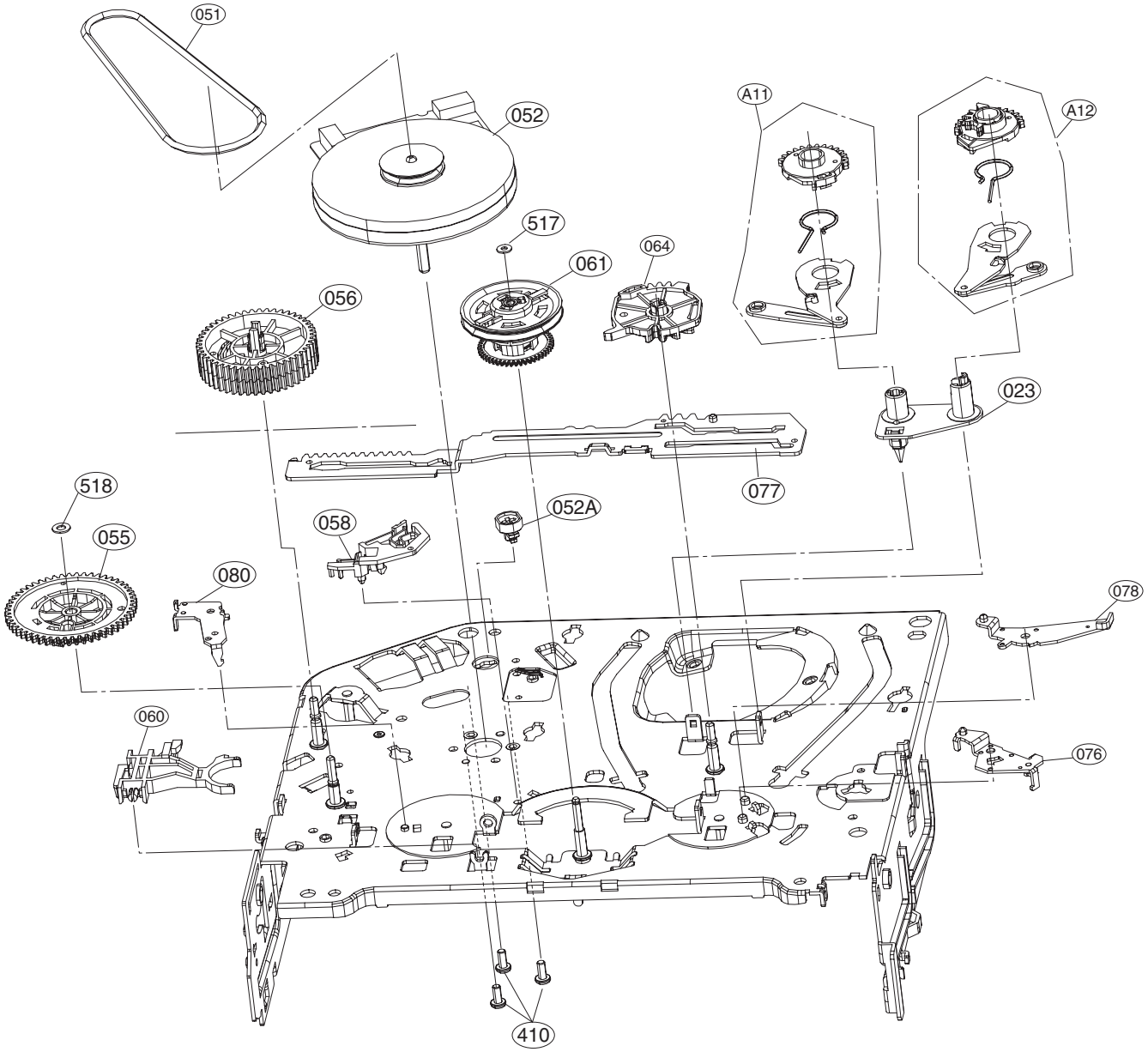
⚠ Symbol No.	Part No.	Part Name	Description	Local
250	LG-3110R-V024B	CASE	VBW8024 PRESS TOP A288G B:3/S:	17US,17UC
250	LG-3110R-V024F	CASE	VC8614P1K NA3GOHB PRESS LV081	16US,16UC
261	LG-5040R-0069S	RUBBER	CCD 05 NEW SILICON OTHER 2T (3(x4)	
274	LG-3300R-V075A	PLATE	ONE BOARD SLIM PRESS A/V JACK	
283	LG-3580R-V145A	DOOR	VCR VJ90 MOLD CST JVC COMBI	17US,17UC
283	LG-3580R-V145F	DOOR	VCR VJ9010CMZ NA1UJJB MOLD CST	16US,16UC
284	LG-442-681A	SPRING	RING DOOR	
285	LG-3580R-T192A	DOOR	VCR VJ90 MOLD TRAY JVC COMBI	17US,17UC
285	LG-3580R-T192F	DOOR	DOOR VCR VJ9010CMZ NA1UJJB MOLD TRA	16US,16UC
286	LG-4970R-0146A	SPRING	SPRING PLATE DR4000 SPRING	
288	LG-4930R-0573A	HOLDER	VCR V9500 MOLD POWER PWB	
⚠ 300	LG-6410RAHP01A	POWER CORD	SPT-2 NON I. 18AWG PT.HARNESSI	
322	LG-3110R-V013A	CASE	SHIELD(SLIM-COMBI) PRESS .	
323	LG-3111R-0089E	CASE ASSEMBLY	PRE AMP SLIM COMBI C-CORE A NO	
324	LG-4930R-0472A	HOLDER	VCR ONE BOARD SLIM MOLD HIPS 6(x2)	
330	LG-3140R-V010M	CHASSIS	V10S 2006 COMBI PRESS RCA W/O	
452	LG-1SZZR-0098A	SCREW/DRAWING	+ 2 D3.0 L10.0 MSWR3/FZMCY-1 3(x4)	
457	LG-1SZZR-0098E	SCREW/DRAWING	+ 2 D3.0 L12.0 MSWR3/FZMCW-1 3(x4)	
463	LG-1SZZR-0098G	SCREW/DRAWING	+ 2 D3.0 L8.0 MSWR3/FZMCW-1 3C(x8)	17US,17UC
465	LG-1SZZR-0097K	SCREW/DRAWING	+ 2 D3.0 L10.0 MSWR3/FZB 3 CR(x2)	
467	LG-1SZZR-0098H	SCREW/DRAWING	+ 2 D3.0 L8.0 MSWR3/FZMCW-1 3(x5)	16US,16UC
469	LG-1SZZR-0098J	SCREW/DRAWING	+ 2 D3.0 L6.5 MSWR3/FZMCY-1 3(x4)	
470	LG-1SZZR-0098K	SCREW/DRAWING	+ 2 D3.0 21MM MSWR3/FZMCY-1 3C(x2)	
471	LG-1SZZR-0098L	SCREW/DRAWING	+ 2 D3.0 L16.0 MSWR3/FN SILVER	
A43	LG-3721R-F432X	PANEL ASSEMBLY/FRONT	VCR VJ9010CMZ NA1CJJB	16US,16UC
A43	LG-3721R-F432Y	PANEL ASSEMBLY/FRONT	VCR VJ9010CMZ NA1CJJS	17US,17UC
A44	LG-3141R-V032J	CHASSIS ASSEMBLY	2006 COMBI LG MODEL M/A/B OPT.	

VHS mechanism assembly and parts list

Block No. M2MM



BACK SIDE


051
052
517
061
064
A11
A12
056
023
077
518
052A
058
055
080
078
060
076
410

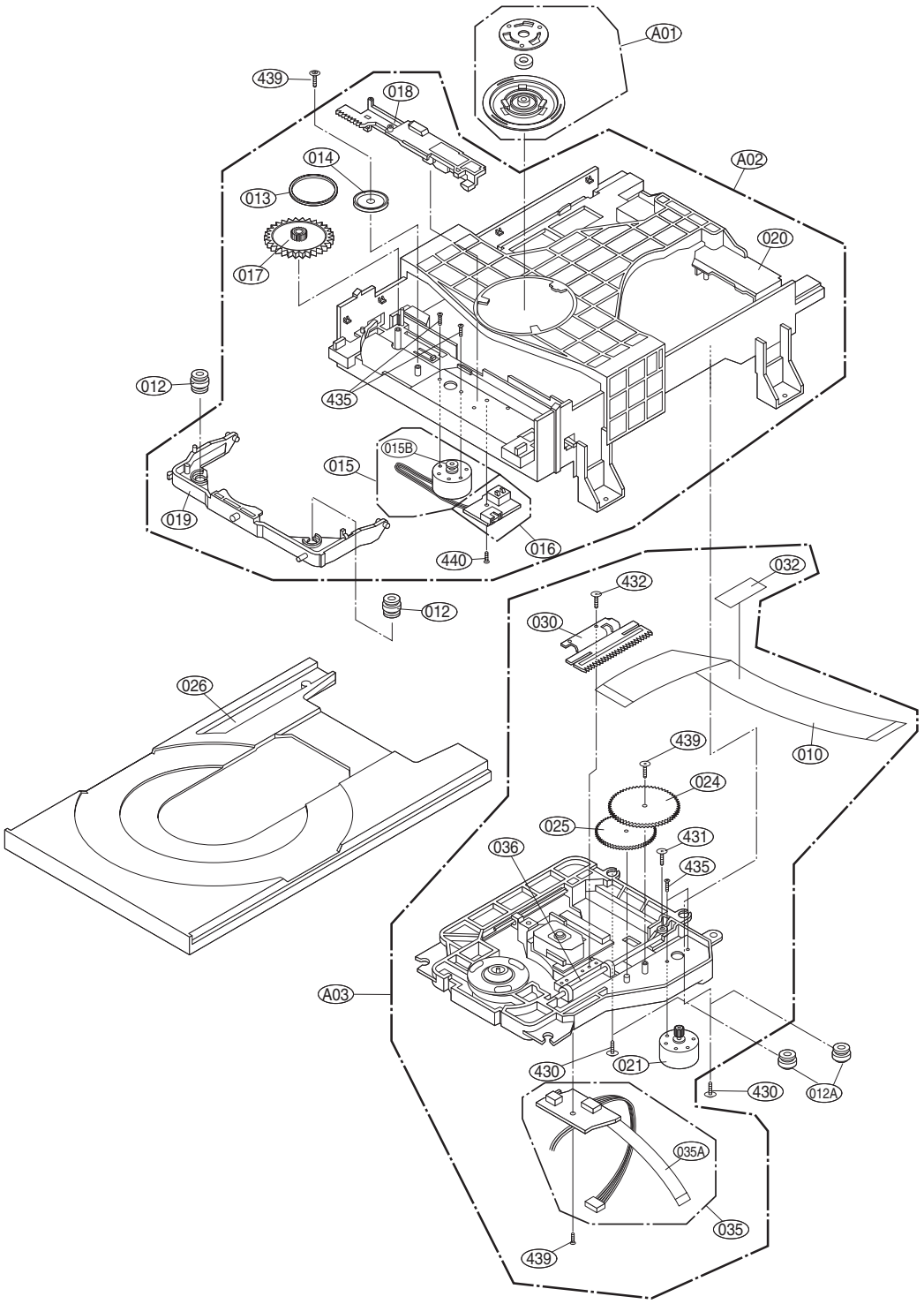
VHS mechanism

Block No. [M][2][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
003	LG-4930R-0449A	HOLDER	DECK/MECHA FPCB(6CH) - D37C MO	
004	LG-5006R-0045A	CAP	DECK/MECHA FPCB - D37C MOLD	
008	LG-6850R-HG18Y	CABLE/FLAT	P=1.25 FFC UL2896(0.05X0.8) 7	
009	LG-4260R-0056A	ARM	DECK/MECHA T/UP OTHER - D37	
011	LG-4261R-0040A	ARM ASSEMBLY	DECK/MECHA TENSION - D37	
012	LG-3041R-M037A	BASE ASSEMBLY	P2 -D37	
013	LG-3041R-M038A	BASE ASSEMBLY	P3 - D37	
014	LG-3041R-M039A	BASE ASSEMBLY	P4 - D37	
015	LG-5870R-0007A	OPENER	DECK/MECHA LID OTHER - D37	
016	LG-3041R-M036D	BASE ASSEMBLY	A/C HEAD (ALPS) - D37 (DUMMY H	
017	LG-4408R-0005A	REEL	DECK/MECHA S OTHER - D37	
021	LG-4421R-M002A	BRAKE ASSEMBLY	T - D37	
022	LG-6520D00004B	HEAD(CIRC)	ST ST FE HEAD FOR D37 13.5	
023	LG-3040R-M056A	BASE	LOADING OTHER - D37	
024	LG-4261R-0042A	ARM ASSEMBLY	DECK/MECHA IDLER(N) - D37	
027	LG-4470R-0133A	GEAR	DECK/MECHA WHEEL OTHER - D37	
028	LG-4408R-0006A	REEL	DECK/MECHA T OTHER - D37	
029	LG-4261R-0037A	ARM ASSEMBLY	DECK/MECHA PINCH - D37 (CHON P	
031	LG-4970R-0175A	SPRING	COIL TENSION - D37(x2)	
051	LG-4400R-0005A	BELT	CAPSTAN	
052	LG-4680R-A015A	MOTOR(MECH)	CAPSTAN F2QVB66 SANKYO FOR D37	
052A	LG-4980R-0029A	SUPPORTER	DECK/MECHA CAPSTAN OTHER - D37	
054	LG-4470R-0136A	GEAR	DECK/MECHA RACK F/L OTHER - D3	
054A	LG-4970R-0171A	SPRING	COIL RACK F/L - D37	
055	LG-4470R-0140A	GEAR	DECK/MECHA DRIVE OTHER - D37	
056	LG-4470R-0139A	GEAR	DECK/MECHA CAM OTHER - D37	
058	LG-4421R-M001A	BRAKE ASSEMBLY	CAPSTAN -D37	
060	LG-4510R-0065A	LEVER	DECK/MECHA F/R OTHER - D37	
061	LG-4265R-0007A	CLUTCH ASSEMBLY	DECK/MECHA D37(N)	
064	LG-4470R-0141A	GEAR	DECK/MECHA SECTOR OTHER - D37	
076	LG-4510R-0063A	LEVER	DECK/MECHA SPRING OTHER - D37	
077	LG-3300R-M203A	PLATE	SLIDER OTHER - D37	
078	LG-4510R-0062A	LEVER	DECK/MECHA TENSION OTHER - D37	
079	LG-3040R-M057A	BASE	TENSION OTHER - D37	
080	LG-4510R-0064A	LEVER	DECK/MECHA BRAKE OTHER - D37	
100	LG-3301R-M193A	PLATE	TOP - D37	
102	LG-4970R-0173A	SPRING	COIL STOPPER - D37	
109	LG-5870R-0008A	OPENER	DECK/MECHA DOOR OTHER - D37	
115	LG-4510R-0070A	LEVER	DECK/MECHA SWITCH(C) OTHER - D	
116	LG-4970R-0163A	SPRING	COIL D35S SWITCH	
405	LG-1MPC0301270	SCREW MACHINE/PAN HEAD	+ D3.0 L3.5 SWRCH18A/FZW	
406	LG-1MEC0302018	SCREW MACHINE/PAN HEAD SPR W	+ D3.0 L6.0 MSWR3/FZY(x3)	
409	LG-1SZZR-0032B	SCREW/DRAWING	+ 1 D2.6 L5.0 SWRCH18A/FZY TAP	
410	LG-1APF0262218	SCREW TAP TITE(B)/PAN HEAD	+ D2.6 L6.8 MSWR3/FZY(x3)	
517	LG-1WZZR-0004D	WASHER/DRAWING	STOPPER	
518	LG-1WZZR-0004A	WASHER/DRAWING	STOPPER	
A01	LG-6723R-0603E	DRUM(CIRC) ASSEMBLY	DECK/MECHA (9C6S) D37-6CH NTSC	
A11	LG-4471R-0017A	GEAR ASSEMBLY	DECK/MECHA P3 - D37	
A12	LG-4471R-0015A	GEAR ASSEMBLY	DECK/MECHA P2 - D37	
A21	LG-4931R-0084A	HOLDER ASSEMBLY	DECK/MECHA CST - D37	
A22	LG-4471R-0016A	GEAR ASSEMBLY	DECK/MECHA RACK F/L - D37	
A23	LG-4261R-0038A	ARM ASSEMBLY	DECK/MECHA F/L - D37	
A24	LG-4511R-0005A	LEVER ASSEMBLY	SWITCH(C) - D37	

DVD mechanism assembly and parts list

Block No. M3MM



DVD mechanism

Block No. [M][3][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
010	LG-6850R-JW23Z	CABLE/FLAT	P=1.0 FFC UL2896(0.035X0.7) 23	
012	LG-5040R-0083A	RUBBER	DVD DP-6/ DP-8 FRONT RIGHT 20(x2)	
012A	LG-5040R-0110A	RUBBER	DVD REAR DP8 RIGHT 20 OTHER BL(x2)	
013	LG-4400R-0006B	BELT	DECK/MECHA DP2-5/ DP7C/DP7A OT	
014	LG-4470R-0154A	GEAR	DECK/MECHA DP8 PULLEY MOLD	
015	LG-4681R-A015A	MOTOR	DECK/MECHA LOADING DP-9 SH	
015B	LG-4560R-0008A	PULLEY	MOTOR	
016	LG-6871R-9294A	PWB(PCB) ASSEMBLY/TOTAL	DP-9C LOADING	
017	LG-4470R-0176A	GEAR	DVD DP-9 LOADING MOLD	
018	LG-4974R-0067A	GUIDE	DVD DP-9C UP/DOWN MOLD	
019	LG-3210R-M008A	FRAME	DP-9C UP/DOWN MOLD	
020	LG-3040R-M064A	BASE	MAIN DP-9C MOLD	
021	LG-4681R-B009B	MOTOR ASSEMBLY	DECK/MECHA DP9 FEEDING	
024	LG-4470R-0179A	GEAR	DVD DP-9 PINION MOLD	
025	LG-4470R-0178A	GEAR	DVD DP-9 MIDDLE MOLD	
026	LG-3390R-0030A	TRAY	DVD DP-9C DISK MOLD	
030	LG-4470R-0180A	GEAR	DVD DP-9 RACK MOLD	
032	LG-6200J000090	FILTER(CIRC)/EMC	ZSHT1228-0730T-K TDK ST	
035	LG-6871R-9295A	PWB(PCB) ASSEMBLY/TOTAL	DP-9C FEEDING	
035A	LG-6850R-GK09Z	CABLE/FLAT	P=1.0 FFC UL2896(0.05X0.65) 11	
036	LG-4370R-0136A	SHAFT	DVD PU/ DR-02 SUS-420J2 OTHER	
430	LG-1SZZR-0064B	SCREW/DRAWING	+ 1 D1.7 L7.0 SWCH18A/BZN DP8(x2)	
431	LG-1SZZR-0062A	SCREW/DRAWING	+ 1 D1.7 L4.5 SWCH18A/NI DP8 P	
432	LG-1SZZR-0072A	SCREW/DRAWING	+ 1 D1.7 L4.5 SWRCH18A/FZY DP8	
435	LG-1SZZR-0011A	SCREW/DRAWING	MACHINE(x4)	
439	LG-1SZZR-0075A	SCREW/DRAWING	+ 1 D1.7 L10.0 SWRCH18A/FZW DP(x3)	
440	LG-1SZZH-1007B	SCREW/DRAWING	+ D2.0 6MM SWRCH16A/ZNBK 4MM 1	
A01	LG-4861R-0016B	CLAMP ASSEMBLY	DISC DP7 - SH	
A02	LG-3041R-D024A	BASE ASSEMBLY	MAIN DP-9C	
A03	LG-3041R-M068A	BASE ASSEMBLY	SLED DP-9C (DI)	

Electrical parts list

Power board

Block No. [0][1]

⚠ Symbol No.	Part No.	Part Name	Description	Local
A47	LG-6871R-4926B	PWB(PCB) ASSEMBLY/TOTAL	VP9160CMZ.COMBI NT. ZORAN. PHI	
⚠ PW101	LG-561-292B	CONNECTOR(CIRC)/DRAWING	GP390 LGC 3P 3.96 STRAIGHT SN	
IC101	LG-0IPMGIH005A	IC/POWER MANAGEMENT	ICE3B0565 INFINEON 8PIN/DIP ST	
⚠ IC102	PZ0ILI817000B	SENSOR	LTV-817B/PHOTO COUPLER(LITEON)	
IC103	LG-0IKE431000A	IC/LINEAR	KIA431 3 PIN TP - -	
IC131	LG-0IPMGKE006B	6B IC/POWER MANAGEMENT	KIA78R33PI CU KEC 4P TO-220IS	
Q161	LG-0TR126809BA	TRANSISTOR/BIPOLARS	KTA1268-BL TP KEC - -	
Q162	LG-0TR534309BA	TRANSISTOR/BIPOLARS	2SC5343-L TP AUK TO92 -	
Q163	LG-0TR928009AD	TRANSISTOR/BIPOLARS	KSA928A-Y/TO-92L TP SAMSUNG TO	
Q164	LG-0TR534409AA	TRANSISTOR/BIPOLARS	2SC5344Y TP AUK - -	
Q165	LG-0TR928009AD	TRANSISTOR/BIPOLARS	KSA928A-Y/TO-92L TP SAMSUNG TO	
Q166	LG-0TR232809AB	TRANSISTOR/BIPOLARS	KSC2328A-Y TP SAMSUNG TO-92L -	
D101	ERA22-10	DIODE/RECTIFIERS	ERA22-10 KFLB/TP /R T/P/FUJI	
D102	LG-0DR104009BA	DIODE/RECTIFIERS	RL104F TP RECTRON - 400V 1A 30	
D121	LG-0DR104009BA	DIODE/RECTIFIERS	RL104F TP RECTRON - 400V 1A 30	
D123	LG-0DR810040BA	DIODE/RECTIFIERS	ERC81-004L22 BK FUJI DO201AD 4	
D124	LG-0DR302000AB	DIODE/RECTIFIERS	HER302 BK RECTRON DO201AD 100V	
D125	LG-0DR810040BA	DIODE/RECTIFIERS	ERC81-004L22 BK FUJI DO201AD 4	
D127	1SS133-T2	DIODE/SWITCHING	1SS133 TP ROHM KOREA - -	
⚠ C101	LG-624-088L	CAPACITOR/DRAWING	435D SUNIL ELECTRONICS 0.1UF/2	
C102	LG-624-088L	CAPACITOR/DRAWING	435D SUNIL ELECTRONICS 0.1UF/2	
C103	LG-0CE1570R610	0 CAPACITOR/FIXED ELECTROLYTIC	150UF SHL 250V 20% BULK FL	
C104	LG-0CN1040K948	CAPACITOR/FIXED TUBULAR(HIGH D	0.1UF D 50V 80%/-20% F(Y5V) TA	
C105	LG-0CQ1031Y519	CAPACITOR/FIXED FILM	0.01UF D 630V 10% PE NI TP5	
C106	LG-624-087G	APACITOR/FIXED CERAMIC(HIGH D	HIGH-VOL 68PF/1KV SMPS SAMHWA	
C107	LG-0CN1030K518	CAPACITOR/TUBULAR(HIGH DIELEC)	0.01UF 50V K B TA26	
C108	QETC1HM-105Z	CAPACITOR/FIXED ELECTROLYTIC	1UF SRA/SS 50V 20% FM5 TP 5	
C109	LG-0CE3366H638	CAPACITOR/FIXED ELECTROLYTIC	33UF SMS/SG 25V 20% FM5 TP 5	
⚠ C110	LG-0CG1020U630	CAPACITOR/FIXED CERAMIC(TEMP.C	1000PF D 400V 20% E(Z5U) R	
⚠ C111	LG-0CG1020U630	CAPACITOR/FIXED CERAMIC(TEMP.C	1000PF D 400V 20% E(Z5U) R	
C115	LG-0CN1040K948	CAPACITOR/FIXED TUBULAR(HIGH D	0.1UF D 50V 80%/-20% F(Y5V) TA	
C121	LG-624-087D	APACITOR/FIXED CERAMIC(HIGH D	HI-VOL 470P/1KVDC SMPS SAMHWA	
C124	LG-0CE477BH630	CAPACITOR/FIXED ELECTROLYTIC	470UF KME TYPE 25V 20% FM5 BUL	
C126	LG-624-085D	APACITOR/FIXED ELECTROLYTIC	CE 47UF/50V KME (SMPS)	
C127	LG-0CE108BF630	CAPACITOR/FIXED ELECTROLYTIC	1000UF KME TYPE 16V 20% FM5 BU	
C128	LG-0CE228BF630	CAPACITOR/FIXED ELECTROLYTIC	2200UF KME TYPE 16V 20% FM5 BU	
C134	LG-0CE227CH618	CAPACITOR/FIXED ELECTROLYTIC	220UF SHL/SD 25V 20% FL TP 5	
C137	LG-0CE3376D638	CAPACITOR/FIXED ELECTROLYTIC	330UF SMS/SG 10V 20% FM5 TP 5	
C138	LG-624-082H	CAPACITOR/FIXED ELECTROLYTIC	CE 1000UF/10V SHL(10*12.5)T/P	
C143	LG-0CQ1042K409	CAPACITOR/FIXED FILM	0.1UF S 50V 5% PE TP5	
C158	QET61CM-106Z	CAPACITOR/FIXED ELECTROLYTIC	10UF SRA/SS 16V 20% FM5 TP 5	
C159	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C160	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C161	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C162	LG-0CE4776D638	CAPACITOR/FIXED ELECTROLYTIC	470UF SMS/SG 10V 20% FM5 TP 5	
C164	QET61CM-106Z	CAPACITOR/FIXED ELECTROLYTIC	10UF SRA/SS 16V 20% FM5 TP 5	
C166	LG-0CN223AK948	CAPACITOR/TUBULAR(HIGH DIELEC)	0.022UF 50V Z F TA26 S	
R100	QRE121J-155Y	RESISTOR/FIXED CARBON FILM	1.5MΩ 1/2 W 5.00% MF10	
R104	LG-0RS5602K619	RESISTOR/FIXED METAL OXIDE FIL	56KΩ 2 W 5.00% TR	
R105	LG-0RD0102F608	RESISTOR/FIXED CARBON FILM	10Ω 1/6 W 5% TA26	
R109	LG-0RS0750K619	RESISTOR/FIXED METAL OXIDE FIL	0.75Ω 2 W 5.00% TR	
R136	QRD161J-104Y	RESISTOR/FIXED CARBON FILM	100KΩ 1/6 W 5% TA26	
R141	QRD161J-221	RESISTOR/FIXED CARBON FILM	220Ω 1/6 W 5% TA26	
R142	QRD161J-222Y	RESISTOR/FIXED CARBON FILM	2.2KΩ 1/6 W 5% TA26	
R143	QRE141J-102Y	RESISTOR/FIXED CARBON FILM	1KΩ 1/6 W 5% TA26	
R144	LG-0RN3301F408	RESISTOR/FIXED METAL FILM	3.3KΩ 1/6 W 1% TA26	
R145	LG-0RN2701F408	RESISTOR/FIXED METAL FILM	2.7KΩ 1/6 W 1% TA26	
R146	QRD161J-271Y	RESISTOR/FIXED CARBON FILM	270Ω 1/6 W 5% TA26	
R154	QRE141J-102Y	RESISTOR/FIXED CARBON FILM	1KΩ 1/6 W 5% TA26	
R155	QRD161J-183Y	RESISTOR/FIXED CARBON FILM	18KΩ 1/6 W 5% TA26	
R156	QRE141J-102Y	RESISTOR/FIXED CARBON FILM	1KΩ 1/6 W 5% TA26	
R157	QRE141J-331Y	RESISTOR/FIXED CARBON FILM	330Ω 1/6 W 5% TA26	
R163	QRD161J-472Y	RESISTOR/FIXED CARBON FILM	4.7KΩ 1/6 W 5% TA26	
R164	QRD161J-472Y	RESISTOR/FIXED CARBON FILM	4.7KΩ 1/6 W 5% TA26	
R165	QRD161J-472Y	RESISTOR/FIXED CARBON FILM	4.7KΩ 1/6 W 5% TA26	
R166	QRD161J-562Y	RESISTOR/FIXED CARBON FILM	5.6KΩ 1/6 W 5% TA26	
R168	QRD161J-562Y	RESISTOR/FIXED CARBON FILM	5.6KΩ 1/6 W 5% TA26	
R172	QRE141J-102Y	RESISTOR/FIXED CARBON FILM	1KΩ 1/6 W 5% TA26	
R174	QRE141J-331Y	RESISTOR/FIXED CARBON FILM	330Ω 1/6 W 5% TA26	
⚠ L102	LG-616-145G	FILTER(CIRC)/DRAWING	SHT LFSQ2215V4-04220	
L124	LG-633-088G	COIL/CHOKE	22MH TOKO 5MM TP	
L127	LG-633-088G	COIL/CHOKE	22MH TOKO 5MM TP	
L128	LG-6140RCC003H	COIL/RF	CHOKE COIL 22 UH 8X8 5 PIE SAM	
⚠ T101	LG-6170RNGW12P	TRANSFORMER/SMPS[COIL]	EER2828 15 PIN SOOJUNG/SAMWHA	
BC101	LG-636-004C	FILTER(CIRC)/EMC	BEAD CORE BFS3550R2FD8/R T/P	
BD101	S1WB/A/60-4101	DIODE/RECTIFIERS	S1WBA60 BK SHINDENGEN - 600V -	
⚠ FR101	LG-0RF0221K634	RESISTOR/VARIABLE[CARBON FILM]	2.2Ω 2 W 5% MF15	
PPM01	LG-6630R-BF03M	CONNECTOR (CIRC)/BOARD TO BOAR	JE121-13 JAE EUN 13P 2.54MM	
⚠ V101	LG-656-004C	VARISTOR/DRAWING	SVC681D-10A SAMHWA 4.O CUT	
ZD102	LG-0DZ202609AA	DIODE/ZENERS	UZ-20BSB 26MM TP PYUNG CHANG D	
ZD103	LG-0DZ622609BB	DIODE/ZENERS	UZ-6.2BSB 26MM TP PYUNG CHANG	
ZD151	LG-0DZ132609AB	DIODE/ZENERS	GDZJ13A 26MM TP GRANDE DO34 0	
ZD152	LG-0DZ100009AA	DIODE/ZENERS	MTZ10B MINI TP ROHM	

Key board

Block No. [0][2]

⚠ Symbol No.	Part No.	Part Name	Description	Local
A50	LG-6871R-7960D	PWB(PCB) ASSEMBLY/TOTAL	05 COMBI PAL MAIN KEY TOOL JVC	
R5J1	QRE141J-152Y	RESISTOR/FIXED CARBON FILM	1.5KΩ 1/6 W 5% TA26	
R5J2	QRD161J-122	RESISTOR/FIXED CARBON FILM	1.2KΩ 1/6 W 5% TA26	
R5J3	QRE141J-152Y	RESISTOR/FIXED CARBON FILM	1.5KΩ 1/6 W 5% TA26	
R5J4	QRD161J-222Y	RESISTOR/FIXED CARBON FILM	2.2KΩ 1/6 W 5% TA26	
R5J5	QRD161J-332Y	RESISTOR/FIXED CARBON FILM	3.3KΩ 1/6 W 5% TA26	
R5J6	QRE141J-123Y	RESISTOR/FIXED CARBON FILM	12KΩ 1/6 W 5% TA26	
CN501	LG-6631R-E007T	CONNECTOR ASSEMBLY	8283-02/9073-02ST 2PIN 60M/M P	
SW507	LG-556-213C	SWITCH/DETECTOR	THV10912B TACT DC 12 V 5-0 A V	
SW508	LG-556-213C	SWITCH/DETECTOR	THV10912B TACT DC 12 V 5-0 A V	
SW509	LG-556-213C	SWITCH/DETECTOR	THV10912B TACT DC 12 V 5-0 A V	
SW510	LG-556-213C	SWITCH/DETECTOR	THV10912B TACT DC 12 V 5-0 A V	
SW511	LG-556-213C	SWITCH/DETECTOR	THV10912B TACT DC 12 V 5-0 A V	
SW512	LG-556-213C	SWITCH/DETECTOR	THV10912B TACT DC 12 V 5-0 A V	
SW513	LG-556-213C	SWITCH/DETECTOR	THV10912B TACT DC 12 V 5-0 A V	

Main board

Block No. [0][3]

⚠ Symbol No.	Part No.	Part Name	Description	Local
A46	LG-3501R-9641H	BOARD ASSEMBLY	VCR VJ9010CMZ LGEDI P-COMBI AM	16US,17US
A46	LG-3501R-9641J	BOARD ASSEMBLY	VCR VJ9010CMZ NA1CJJ%LGEDI P-C	16UC,17UC
IC201	LG-0ILNRRH039A	IC/LINEAR	BA5888FP ROHM 28PIN/HSOP R/TP	
IC202	LG-0ILNRUC003A	IC/LINEAR	LM358L UTC 8PIN/SOP R/TP OPAMP	
IC301	LG-0ILNRHI009A	IC/LINEAR	HA118725NF HITACHI 100PIN QFP	
IC401	LG-0IPRPTI064A	IC/PERIPHERALS	PCM1753DBQR TEXAS INSTRUMENT 1	
IC402	LG-0ILNRUC001A	IC/LINEAR	MC4580 UTC 8PIN/SOP R/TP 2CH O	
IC501	LG-0IMCRMI105D	IC/MICRO CONTROLLER	M3776AMCH-1F8GP 4RD RENESAS 10	
IC504	LG-0IKE703100A	IC/LINEAR	KIA7031P 3P 3.1V RESET(TAPING)	
IC505	LG-0IKE704200B	IC/POWER	KIA7042P(AT) TO-92 4.2V RESET	
IC5F1	LG-0ILNRPY001B	IC/LINEAR	PT6955 PTC 24PIN SOP R/TP LED	
IC601	LG-0ILNRZR002B	IC/LINEAR	ZR36868ELCG B1 ZORAN 208PIN/QF	
IC602	LG-0IMMREB006C	IC/MEMORIES	M12L16161A-7T ESMT 50PIN/TSOP	
IC604A	LG-6957R-605AP	PROGRAM	DVD PROGRAM 2005 VJ9010CMZ(USA	
IC605	LG-0ISS240210A	IC/MEMORIES	S524A40X21-SCT0 SOP8 TP EEPROM	
IC701	LG-0IPMGUC006A	IC/POWER MANAGEMENT	LD1117A-1.8V UTC TO252 R/TP 1.	
IC801	LG-0ILNRSA013B	IC/LINEAR	LA72670BM-L-MPB-E SANYO 80PIN	

⚠ Symbol No.	Part No.	Part Name	Description	Local
Q201	2SA1037K/QR/-X	TRANSISTOR/BIPOLARS	2SA1037K-Q CHIP TP ROHM -	
Q202	2SA1037K/QR/-X	TRANSISTOR/BIPOLARS	2SA1037K-Q CHIP TP ROHM -	
Q203	LG-0TRKE80068A	TRANSISTOR/BIPOLARS	KTA1531T-Y GRADE KEC R/TP TSM	
Q204	LG-0TRKE80068A	TRANSISTOR/BIPOLARS	KTA1531T-Y GRADE KEC R/TP TSM	
Q205	LG-0TRKE80067A	TRANSISTOR/BIPOLARS	KTC3531T KEC R/TP TSM 20V 1A	
Q206	LG-0TRKE80067A	TRANSISTOR/BIPOLARS	KTC3531T KEC R/TP TSM 20V 1A	
Q207	KTA1504/G/-X	TRANSISTOR/BIPOLARS	KTA1504 TP KEC - -GR-T1(ASG) C	
Q208	LG-0TR387509AC	TRANSISTOR/BIPOLARS	CHIP KTC3875S-GR-T1(ALG) TP KE	
Q301	LG-0TR534409AA	TRANSISTOR/BIPOLARS	2SC5344Y TP AUK - -	
Q302	LG-0TR928009AD	TRANSISTOR/BIPOLARS	KSA928A-Y/TO-92L TP SAMSUNG TO	
Q303	KRC103S-X	TRANSISTOR/BIPOLARS	CHIP KRC103S-T1(NC)22-22 TP KE	
Q305	LG-0TR387509AC	TRANSISTOR/BIPOLARS	CHIP KTC3875S-GR-T1(ALG) TP KE	
Q306	LG-0TR387509AC	TRANSISTOR/BIPOLARS	CHIP KTC3875S-GR-T1(ALG) TP KE	
Q307	LG-0TR103009AC	TRANSISTOR/BIPOLARS	KRA103S-T1(PC)22-22 CHIP TP KE	
Q403	LG-0TR103009AC	TRANSISTOR/BIPOLARS	KRA103S-T1(PC)22-22 CHIP TP KE	
Q404	LG-0TR103009AC	TRANSISTOR/BIPOLARS	KRA103S-T1(PC)22-22 CHIP TP KE	
Q405	2SA1037K/QR/-X	TRANSISTOR/BIPOLARS	2SA1037K-Q CHIP TP ROHM - -	
Q501	LG-0TR387509AC	TRANSISTOR/BIPOLARS	CHIP KTC3875S-GR-T1(ALG) TP KE	
Q503	LG-0TR928009AD	TRANSISTOR/BIPOLARS	KSA928A-Y/TO-92L TP SAMSUNG TO	
Q504	LG-0TR387509AC	TRANSISTOR/BIPOLARS	CHIP KTC3875S-GR-T1(ALG) TP KE	
Q505	LG-0TR387509AC	TRANSISTOR/BIPOLARS	CHIP KTC3875S-GR-T1(ALG) TP KE	
Q507	KTA1504/G/-X	TRANSISTOR/BIPOLARS	KTA1504 TP KEC - -GR-T1(ASG) C	
Q601	LG-0TR390409DA	TRANSISTOR/BIPOLARS	2N3904S NPN SOT-23 TP KEC - -	
Q602	LG-0TR390409DA	TRANSISTOR/BIPOLARS	2N3904S NPN SOT-23 TP KEC - -	
Q603	LG-0TR390409DA	TRANSISTOR/BIPOLARS	2N3904S NPN SOT-23 TP KEC - -	
Q701	LG-0TR534409AA	TRANSISTOR/BIPOLARS	2SC5344Y TP AUK - -	
Q805	LG-0TR387509AC	TRANSISTOR/BIPOLARS	CHIP KTC3875S-GR-T1(ALG) TP KE	
Q901	LG-0TR387509AC	TRANSISTOR/BIPOLARS	CHIP KTC3875S-GR-T1(ALG) TP KE	
Q902	LG-0TR387509AC	TRANSISTOR/BIPOLARS	CHIP KTC3875S-GR-T1(ALG) TP KE	
Q924	KTA1504/G/-X	TRANSISTOR/BIPOLARS	KTA1504 TP KEC - -GR-T1(ASG) C	
Q930	LG-0TR387509AC	TRANSISTOR/BIPOLARS	CHIP KTC3875S-GR-T1(ALG) TP KE	
D401	LG-0DD181009AA	DIODE/DRAWING	DIODE CHIP KDS181-T1(A3) KEC	
D802	1SS133-T2	DIODE/SWITCHING	1SS133 TP ROHM KOREA - - -	
C201	QET61CM-107Z	CAPACITOR/FIXED ELECTROLYTIC	100UF SRA/SS 16V 20% FM5 TP 5	
C202	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C204	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C205	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C206	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C207	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C208	QET61CM-476	CAPACITOR/FIXED ELECTROLYTIC	47UF SRA/SS 16V 20% FM5 TP 5	
C209	QET61CM-476	CAPACITOR/FIXED ELECTROLYTIC	47UF SRA/SS 16V 20% FM5 TP 5	
C210	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C211	NDC31HJ-101X	CAPACITOR/FIXED CERAMIC(HIGH D	100PF 50V 5% NP0 1608 R/TP	
C212	LG-0CH1472K562	CAPACITOR/FIXED CERAMIC(TEMP.C	4700PF 50V 10% X7R(X) 1608 R/T	
C213	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C214	LG-0CE4775C638	CAPACITOR/FIXED ELECTROLYTIC	470UF SR/SV 6.3V 20% FM5 TP 5	
C215	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C216	NDC31HJ-101X	CAPACITOR/FIXED CERAMIC(HIGH D	100PF 50V 5% NP0 1608 R/TP	
C219	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C220	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C221	QET61CM-476	CAPACITOR/FIXED ELECTROLYTIC	47UF SRA/SS 16V 20% FM5 TP 5	
C301	LG-0CE4764C638	CAPACITOR/FIXED ELECTROLYTIC	47UF SRA/SS 6.3V 20% FM5 TP 5	
C302	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C303	QETC1HM-105Z	CAPACITOR/FIXED ELECTROLYTIC	1UF SRA/SS 50V 20% FM5 TP 5	
C304	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C305	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C306	LG-0CH1222K562	CAPACITOR/FIXED CERAMIC(TEMP.C	2200PF 50V 10% X7R(X) 1608 R/T	
C307	LG-0CH1122K512	CAPACITOR/FIXED CERAMIC(TEMP.C	1200PF 50V 10% B(5YP) 1608 R/T	
C308	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C309	QET61CM-226	CAPACITOR/FIXED ELECTROLYTIC	22UF SRA/SS 16V 20% FM5 TP 5	
C310	QET61CM-226	CAPACITOR/FIXED ELECTROLYTIC	22UF SRA/SS 16V 20% FM5 TP 5	
C312	LG-0CH4471K412	CAPACITOR/FIXED CERAMIC(HIGH D	470PF 50V 5% NP0 1608 R/TP	
C313	LG-0CQ2231N409	CAPACITOR/FIXED FILM	0.022UF D 100V 5% PE TP5	
C314	LG-0CE4764C638	CAPACITOR/FIXED ELECTROLYTIC	47UF SRA/SS 6.3V 20% FM5 TP 5	
C317	QET61CM-106Z	CAPACITOR/FIXED ELECTROLYTIC	10UF SRA/SS 16V 20% FM5 TP 5	
C319	QET61CM-106Z	CAPACITOR/FIXED ELECTROLYTIC	10UF SRA/SS 16V 20% FM5 TP 5	
C320	LG-0CH4151K412	CAPACITOR/FIXED CERAMIC(HIGH D	150PF 50V 5% NP0 1608 R/TP	
C321	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C322	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C323	LG-0CH4470K412	CAPACITOR/FIXED CERAMIC(HIGH D	47PF 50V 5% NP0 1608 R/TP	
C324	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C325	QETC1HM-105Z	CAPACITOR/FIXED ELECTROLYTIC	1UF SRA/SS 50V 20% FM5 TP 5	
C326	LG-0CH1105F942	CAPACITOR/FIXED CERAMIC(TEMP.C	1000000PF 16V 80%/-20% Y5V(F)	
C327	QETC1HM-225Z	CAPACITOR/FIXED ELECTROLYTIC	2.2UF SRA/SS 50V 20% FM5 TP 5	
C328	LG-0CE2274C638	CAPACITOR/FIXED ELECTROLYTIC	220UF SRA/SS 6.3V 20% FM5 TP 5	
C329	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C330	LG-0CH1105F942	CAPACITOR/FIXED CERAMIC(TEMP.C	1000000PF 16V 80%/-20% Y5V(F)	
C331	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C332	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C335	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C336	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C337	LG-0CE1063F638	CAPACITOR/FIXED ELECTROLYTIC	10UF SRE/SE 16V 20% FM5 TP 5	
C338	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C339	QETF1HM-335Z	CAPACITOR/FIXED ELECTROLYTIC	3.3UF SRA/SS 50V 20% FM5 TP 5	
C340	LG-0CE1063F638	CAPACITOR/FIXED ELECTROLYTIC	10UF SRE/SE 16V 20% FM5 TP 5	
C341	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C342	LG-0CH4331K412	CAPACITOR/FIXED CERAMIC(HIGH D	330PF 50V 5% NP0 1608 R/TP	
C343	LG-0CE4764C638	CAPACITOR/FIXED ELECTROLYTIC	47UF SRA/SS 6.3V 20% FM5 TP 5	
C344	LG-0CH1473H942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.047UF 25V 80%/-20% Y5V(F) 16	
C346	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C347	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C348	QETC1HM-105Z	CAPACITOR/FIXED ELECTROLYTIC	1UF SRA/SS 50V 20% FM5 TP 5	
C349	LG-0CC0500K015	CAPACITOR/FIXED CERAMIC(TEMP.C	5PF D 50V O.25 PF NP0 TR	
C350	LG-0CE4764C638	CAPACITOR/FIXED ELECTROLYTIC	47UF SRA/SS 6.3V 20% FM5 TP 5	
C351	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C352	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C353	QETF1HM-335Z	CAPACITOR/FIXED ELECTROLYTIC	3.3UF SRA/SS 50V 20% FM5 TP 5	
C354	LG-0CH1472K562	CAPACITOR/FIXED CERAMIC(TEMP.C	4700PF 50V 10% X7R(X) 1608 R/T	
C355	QETC1HM-225Z	CAPACITOR/FIXED ELECTROLYTIC	2.2UF SRA/SS 50V 20% FM5 TP 5	
C356	LG-0CH1333K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.033UF 50V 10% X7R(X) 1608 R/	
C357	LG-0CH1223K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.022UF 50V 80%/-20% Y5V(F) 16	
C358	QETC1HM-105Z	CAPACITOR/FIXED ELECTROLYTIC	1UF SRA/SS 50V 20% FM5 TP 5	
C359	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C360	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C362	NDC31HJ-270X	CAPACITOR/FIXED CERAMIC(HIGH D	27PF 50V 5% NP0 1608 R/TP	
C365	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C366	LG-0CE4764C638	CAPACITOR/FIXED ELECTROLYTIC	47UF SRA/SS 6.3V 20% FM5 TP 5	
C367	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C368	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C369	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C370	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C371	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C374	LG-0CH1105F942	CAPACITOR/FIXED CERAMIC(TEMP.C	1000000PF 16V 80%/-20% Y5V(F)	
C376	LG-0CH4181K412	CAPACITOR/FIXED CERAMIC(HIGH D	180PF 50V 5% NP0 1608 R/TP	
C377	LG-0CH4151K412	CAPACITOR/FIXED CERAMIC(HIGH D	150PF 50V 5% NP0 1608 R/TP	
C3A1	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C401	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C402	LG-0CE4774C638	CAPACITOR/FIXED ELECTROLYTIC	470UF SRA/SS 6.3V 20% FM5 TP 5	
C405	QET61CM-106Z	CAPACITOR/FIXED ELECTROLYTIC	10UF SRA/SS 16V 20% FM5 TP 5	
C406	QET61CM-226	CAPACITOR/FIXED ELECTROLYTIC	22UF SRA/SS 16V 20% FM5 TP 5	
C407	LG-0CE1073F638	CAPACITOR/FIXED ELECTROLYTIC	100UF SRE/SE 16V 20% FM5 TP 5	
C408	QET61CM-226	CAPACITOR/FIXED ELECTROLYTIC	22UF SRA/SS 16V 20% FM5 TP 5	
C409	NDC31HJ-101X	CAPACITOR/FIXED CERAMIC(HIGH D	100PF 50V 5% NP0 1608 R/TP	
C410	NDC31HJ-101X	CAPACITOR/FIXED CERAMIC(HIGH D	100PF 50V 5% NP0 1608 R/TP	
C411	NDC31HJ-101X	CAPACITOR/FIXED CERAMIC(HIGH D	100PF 50V 5% NP0 1608 R/TP	
C412	NDC31HJ-101X	CAPACITOR/FIXED CERAMIC(HIGH D	100PF 50V 5% NP0 1608 R/TP	
C413	LG-0CE1073F638	CAPACITOR/FIXED ELECTROLYTIC	100UF SRE/SE 16V 20% FM5 TP 5	
C414	QET61CM-226	CAPACITOR/FIXED ELECTROLYTIC	22UF SRA/SS 16V 20% FM5 TP 5	
C415	QET61CM-226	CAPACITOR/FIXED ELECTROLYTIC	22UF SRA/SS 16V 20% FM5 TP 5	
C418	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C500	LG-0CE4775C638	CAPACITOR/FIXED ELECTROLYTIC	470UF SR/SV 6.3V 20% FM5 TP 5	
C501	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C502	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C503	LG-0CE2274C638	CAPACITOR/FIXED ELECTROLYTIC	220UF SRA/SS 6.3V 20% FM5 TP 5	
C505	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C508	LG-0CH1223K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.022UF 50V 80%/-20% Y5V(F) 16	
C510	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C511	LG-0CH1223K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.022UF 50V 80%/-20% Y5V(F) 16	
C514	LG-0CH4240K412	CAPACITOR/FIXED CERAMIC(HIGH D	24PF 50V 5% NP0 1608 R/TP	
C515	LG-0CH4240K412	CAPACITOR/FIXED CERAMIC(HIGH D	24PF 50V 5% NP0 1608 R/TP	
C516	QET61CM-106Z	CAPACITOR/FIXED ELECTROLYTIC	10UF SRA/SS 16V 20% FM5 TP 5	
C520	LG-0CH1223K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.022UF 50V 80%/-20% Y5V(F) 16	
C525	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C526	LG-0CE4765K618	CAPACITOR/FIXED ELECTROLYTIC	47UF SR/SV 50V 20% FL TP 5	
C531	LG-0CE2274C638	CAPACITOR/FIXED ELECTROLYTIC	220UF SRA/SS 6.3V 20% FM5 TP 5	
C534	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C535	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C542	LG-0CH4681K412	CAPACITOR/FIXED CERAMIC(HIGH D	680PF 50V 5% NP0 1608 R/TP	
C543	LG-0CH1223K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.022UF 50V 80%/-20% Y5V(F) 16	
C544	LG-0CH1473H942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.047UF 25V 80%/-20% Y5V(F) 16	
C545	LG-0CH1223K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.022UF 50V 80%/-20% Y5V(F) 16	
C546	LG-0CE4764H638	CAPACITOR/FIXED ELECTROLYTIC	47UF SRA/SS 25V 20% FM5 TP 5	
C551	LG-0CH1333K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.033UF 50V 10% X7R(X) 1608 R/	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C552	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C561	QET61CM-106Z	CAPACITOR/FIXED ELECTROLYTIC	10UF SRA/SS 16V 20% FM5 TP 5	
C566	LG-0CH1102K512	CAPACITOR/FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
C567	LG-0CH1102K512	CAPACITOR/FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
C568	LG-0CH1102K512	CAPACITOR/FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
C569	LG-0CH1102K512	CAPACITOR/FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
C570	NDC31HJ-180X	CAPACITOR/FIXED CERAMIC(HIGH D	18PF 50V 5% NP0 1608 R/TP	
C571	LG-0CH4200K412	CAPACITOR/FIXED CERAMIC(HIGH D	20PF 50V 5% NP0 1608 R/TP	
C572	LG-0CH1223K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.022UF 50V 80%/-20% Y5V(F) 16	
C573	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C574	LG-0CH1102K512	CAPACITOR/FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
C577	LG-0CH1223K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.022UF 50V 80%/-20% Y5V(F) 16	
C578	LG-0CE2274C638	CAPACITOR/FIXED ELECTROLYTIC	220UF SRA/SS 6.3V 20% FM5 TP 5	
C579	LG-0CE2274C638	CAPACITOR/FIXED ELECTROLYTIC	220UF SRA/SS 6.3V 20% FM5 TP 5	
C580	LG-0CH1223K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.022UF 50V 80%/-20% Y5V(F) 16	
C581	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C582	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C583	LG-0CH1102K512	CAPACITOR/FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
C584	LG-0CE4764C638	CAPACITOR/FIXED ELECTROLYTIC	47UF SRA/SS 6.3V 20% FM5 TP 5	
C585	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C586	QET61CM-106Z	CAPACITOR/FIXED ELECTROLYTIC	10UF SRA/SS 16V 20% FM5 TP 5	
C588	LG-0CH1102K512	CAPACITOR/FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
C589	NDC31HJ-221X	CAPACITOR/FIXED CERAMIC(HIGH D	220PF 50V 5% NP0 1608 R/TP	
C590	LG-0CH1105F942	CAPACITOR/FIXED CERAMIC(TEMP.C	1000000PF 16V 80%/-20% Y5V(F)	
C592	QET61CM-106Z	CAPACITOR/FIXED ELECTROLYTIC	10UF SRA/SS 16V 20% FM5 TP 5	
C593	LG-0CH4471K412	CAPACITOR/FIXED CERAMIC(HIGH D	470PF 50V 5% NP0 1608 R/TP	
C594	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C595	LG-0CH4120K412	CAPACITOR/FIXED CERAMIC(HIGH D	12PF 50V 5% NP0 1608 R/TP	
C596	NDC31HJ-180X	CAPACITOR/FIXED CERAMIC(HIGH D	18PF 50V 5% NP0 1608 R/TP	
C597	LG-0CH4681K412	CAPACITOR/FIXED CERAMIC(HIGH D	680PF 50V 5% NP0 1608 R/TP	
C598	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C5G1	LG-0CE1086C638	CAPACITOR/FIXED ELECTROLYTIC	1000000000PF SMS/SG 6.3V 20% F	
C5L2	LG-0CH1102K512	CAPACITOR/FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
C5L3	LG-0CH1102K512	CAPACITOR/FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
C601	LG-0CH1122K562	CAPACITOR/FIXED CERAMIC(TEMP.C	1200PF 50V 10% X7R(X) 1608 R/T	
C602	LG-0CH1273F562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.027UF 1608 16V 10% X7R R/TP	
C603	LG-0CH1273F562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.027UF 1608 16V 10% X7R R/TP	
C604	NDC31HJ-221X	CAPACITOR/FIXED CERAMIC(HIGH D	220PF 50V 5% NP0 1608 R/TP	
C605	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C606	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C607	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C608	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C609	LG-0CH1102K562	CAPACITOR/FIXED CERAMIC(TEMP.C	1000PF 50V 10% X7R(X) 1608 R/T	
C610	LG-0CH1102K562	CAPACITOR/FIXED CERAMIC(TEMP.C	1000PF 50V 10% X7R(X) 1608 R/T	
C611	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C612	LG-0CE2274C638	CAPACITOR/FIXED ELECTROLYTIC	220UF SRA/SS 6.3V 20% FM5 TP 5	
C613	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C614	QET61CM-107Z	CAPACITOR/FIXED ELECTROLYTIC	100UF SRA/SS 16V 20% FM5 TP 5	
C615	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C616	QET61CM-107Z	CAPACITOR/FIXED ELECTROLYTIC	100UF SRA/SS 16V 20% FM5 TP 5	
C618	QET61CM-107Z	CAPACITOR/FIXED ELECTROLYTIC	100UF SRA/SS 16V 20% FM5 TP 5	
C621	LG-0CH4150K412	CAPACITOR/FIXED CERAMIC(HIGH D	15PF 50V 5% NP0 1608 R/TP	
C622	LG-0CH4150K412	CAPACITOR/FIXED CERAMIC(HIGH D	15PF 50V 5% NP0 1608 R/TP	
C623	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C624	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C625	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C626	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C627	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C628	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C629	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C631	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C632	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C633	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C634	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C637	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C638	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C639	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C640	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C641	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C642	QET61CM-476	CAPACITOR/FIXED ELECTROLYTIC	47UF SRA/SS 16V 20% FM5 TP 5	
C643	QET61CM-476	CAPACITOR/FIXED ELECTROLYTIC	47UF SRA/SS 16V 20% FM5 TP 5	
C644	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C645	QET61CM-476	CAPACITOR/FIXED ELECTROLYTIC	47UF SRA/SS 16V 20% FM5 TP 5	
C646	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C647	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C648	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C649	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C650	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C651	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C652	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C653	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C660	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C662	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C664	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C673	LG-0CE4775C638	CAPACITOR/FIXED ELECTROLYTIC	470UF SR/SV 6.3V 20% FM5 TP 5	
C701	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C702	LG-0CE4775C638	CAPACITOR/FIXED ELECTROLYTIC	470UF SR/SV 6.3V 20% FM5 TP 5	
C703	LG-0CH1104K512	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 10% B(5YP) 1608 R/TP	
C704	LG-0CH1104K512	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 10% B(5YP) 1608 R/TP	
C706	LG-0CH4300K412	CAPACITOR/FIXED CERAMIC(HIGH D	30PF 50V 5% NP0 1608 R/TP	
C707	LG-0CH4300K412	CAPACITOR/FIXED CERAMIC(HIGH D	30PF 50V 5% NP0 1608 R/TP	
C712	QET61CM-106Z	CAPACITOR/FIXED ELECTROLYTIC	10UF SRA/SS 16V 20% FM5 TP 5	
C718	LG-0CH4560K412	CAPACITOR/FIXED CERAMIC(HIGH D	56PF 50V 5% NP0 1608 R/TP	
C801	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C806	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C807	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C808	QETC1HM-105Z	CAPACITOR/FIXED ELECTROLYTIC	1UF SRA/SS 50V 20% FM5 TP 5	
C816	QETC1HM-225Z	CAPACITOR/FIXED ELECTROLYTIC	2.2UF SRA/SS 50V 20% FM5 TP 5	
C821	LG-0CH1105F942	CAPACITOR/FIXED CERAMIC(TEMP.C	1000000PF 16V 80%/-20% Y5V(F)	
C822	LG-0CH1222K562	CAPACITOR/FIXED CERAMIC(TEMP.C	2200PF 50V 10% X7R(X) 1608 R/T	
C823	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C826	QET61CM-106Z	CAPACITOR/FIXED ELECTROLYTIC	10UF SRA/SS 16V 20% FM5 TP 5	
C827	LG-0CH1105F942	CAPACITOR/FIXED CERAMIC(TEMP.C	1000000PF 16V 80%/-20% Y5V(F)	
C828	QET61CM-476	CAPACITOR/FIXED ELECTROLYTIC	47UF SRA/SS 16V 20% FM5 TP 5	
C829	QET61CM-226	CAPACITOR/FIXED ELECTROLYTIC	22UF SRA/SS 16V 20% FM5 TP 5	
C830	QET61CM-106Z	CAPACITOR/FIXED ELECTROLYTIC	10UF SRA/SS 16V 20% FM5 TP 5	
C831	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C832	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C833	QET61CM-226	CAPACITOR/FIXED ELECTROLYTIC	22UF SRA/SS 16V 20% FM5 TP 5	
C834	LG-0CH1472K562	CAPACITOR/FIXED CERAMIC(TEMP.C	4700PF 50V 10% X7R(X) 1608 R/T	
C836	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C838	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C839	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C840	QET61CM-106Z	CAPACITOR/FIXED ELECTROLYTIC	10UF SRA/SS 16V 20% FM5 TP 5	
C841	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C842	QET61CM-106Z	CAPACITOR/FIXED ELECTROLYTIC	10UF SRA/SS 16V 20% FM5 TP 5	
C843	QET61CM-226	CAPACITOR/FIXED ELECTROLYTIC	22UF SRA/SS 16V 20% FM5 TP 5	
C844	LG-0CH1472K562	CAPACITOR/FIXED CERAMIC(TEMP.C	4700PF 50V 10% X7R(X) 1608 R/T	
C845	LG-0CH1103K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.01UF 50V 10% X7R(X) 1608 R/T	
C846	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C847	QET61CM-106Z	CAPACITOR/FIXED ELECTROLYTIC	10UF SRA/SS 16V 20% FM5 TP 5	
C848	LG-0CH1105F942	CAPACITOR/FIXED CERAMIC(TEMP.C	1000000PF 16V 80%/-20% Y5V(F)	
C849	LG-0CH1105F942	CAPACITOR/FIXED CERAMIC(TEMP.C	1000000PF 16V 80%/-20% Y5V(F)	
C851	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C866	QETC1HM-225Z	CAPACITOR/FIXED ELECTROLYTIC	2.2UF SRA/SS 50V 20% FM5 TP 5	
C871	LG-0CE4753K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRE/SE 50V 20% FM5 TAPPI	
C872	LG-0CH4560K412	CAPACITOR/FIXED CERAMIC(HIGH D	56PF 50V 5% NP0 1608 R/TP	
C873	QETC1HM-225Z	CAPACITOR/FIXED ELECTROLYTIC	2.2UF SRA/SS 50V 20% FM5 TP 5	
C874	LG-0CH1105F942	CAPACITOR/FIXED CERAMIC(TEMP.C	1000000PF 16V 80%/-20% Y5V(F)	
C875	LG-0CH1333K562	CAPACITOR/FIXED CERAMIC(TEMP.C	0.033UF 50V 10% X7R(X) 1608 R/	
C876	QETC1HM-105Z	CAPACITOR/FIXED ELECTROLYTIC	1UF SRA/SS 50V 20% FM5 TP 5	
C877	QETC1HM-105Z	CAPACITOR/FIXED ELECTROLYTIC	1UF SRA/SS 50V 20% FM5 TP 5	
C878	LG-0CH4560K412	CAPACITOR/FIXED CERAMIC(HIGH D	56PF 50V 5% NP0 1608 R/TP	
C879	QETC1HM-225Z	CAPACITOR/FIXED ELECTROLYTIC	2.2UF SRA/SS 50V 20% FM5 TP 5	
C880	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C881	QETC1HM-105Z	CAPACITOR/FIXED ELECTROLYTIC	1UF SRA/SS 50V 20% FM5 TP 5	
C882	QET61CM-476	CAPACITOR/FIXED ELECTROLYTIC	47UF SRA/SS 16V 20% FM5 TP 5	
C883	QETC1HM-105Z	CAPACITOR/FIXED ELECTROLYTIC	1UF SRA/SS 50V 20% FM5 TP 5	
C884	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C885	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C886	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C887	QETF1HM-335Z	CAPACITOR/FIXED ELECTROLYTIC	3.3UF SRA/SS 50V 20% FM5 TP 5	
C888	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C889	LG-0CE4754K638	CAPACITOR/FIXED ELECTROLYTIC	4.7UF SRA/SS 50V 20% FM5 TP 5	
C902	LG-0CE4775C638	CAPACITOR/FIXED ELECTROLYTIC	470UF SR/SV 6.3V 20% FM5 TP 5	
C903	LG-0CE1086C638	CAPACITOR/FIXED ELECTROLYTIC	1000000000PF SMS/SG 6.3V 20% F	
C904	LG-0CE4775C638	CAPACITOR/FIXED ELECTROLYTIC	470UF SR/SV 6.3V 20% FM5 TP 5	
C911	LG-0CE4775C638	CAPACITOR/FIXED ELECTROLYTIC	470UF SR/SV 6.3V 20% FM5 TP 5	
C918	LG-0CH4151K412	CAPACITOR/FIXED CERAMIC(HIGH D	150PF 50V 5% NP0 1608 R/TP	
C919	LG-0CH4181K412	CAPACITOR/FIXED CERAMIC(HIGH D	180PF 50V 5% NP0 1608 R/TP	
C921	LG-0CH4151K412	CAPACITOR/FIXED CERAMIC(HIGH D	150PF 50V 5% NP0 1608 R/TP	
C923	LG-0CH4181K412	CAPACITOR/FIXED CERAMIC(HIGH D	180PF 50V 5% NP0 1608 R/TP	
C996	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
C9A1	LG-0CH1102K512	CAPACITOR/FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
C9A3	LG-0CH1102K512	CAPACITOR/FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
C9A5	LG-0CH1102K512	CAPACITOR/FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C9A7	LG-0CH1102K512	CAPACITOR/FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
R204	LG-0RH0332C622	RESISTOR/METAL GLAZED(CHIP)	33Ω 1 / 16 W 1608 5.00% D	
R216	NRSA63J-221X	RESISTOR/METAL GLAZED(CHIP)	220Ω 1 / 16 W 1608 5.00% D	
R217	LG-0RH0331C622	RESISTOR/METAL GLAZED(CHIP)	3.3Ω 1 / 16 W 1608 5.00% D	
R218	NRSA63J-221X	RESISTOR/METAL GLAZED(CHIP)	220Ω 1 / 16 W 1608 5.00% D	
R219	LG-0RH0471C622	RESISTOR/METAL GLAZED(CHIP)	4.7Ω 1 / 16 W 1608 5.00% D	
R220	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R221	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R222	LG-0RH0101C622	RESISTOR/METAL GLAZED(CHIP)	1Ω 1 / 16 W 1608 5.00% D	
R223	NRSA6AD-392W	RESISTOR/METAL GLAZED(CHIP)	3.9KΩ 1 / 16 W 1608 5.00% D	
R228	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R229	NRSA6AD-473W	RESISTOR/METAL GLAZED(CHIP)	47KΩ 1 / 16 W 1608 5.00% D	
R232	NRSA63J-682X	RESISTOR/METAL GLAZED(CHIP)	6.8KΩ 1 / 16 W 1608 5.00% D	
R233	LG-0RH2002C622	RESISTOR/METAL GLAZED(CHIP)	20KΩ 1 / 16 W 1608 5.00% D	
R238	LG-0RH0101C622	RESISTOR/METAL GLAZED(CHIP)	1Ω 1 / 16 W 1608 5.00% D	
R239	LG-0RH0101C622	RESISTOR/METAL GLAZED(CHIP)	1Ω 1 / 16 W 1608 5.00% D	
R243	NRSA63J-221X	RESISTOR/METAL GLAZED(CHIP)	220Ω 1 / 16 W 1608 5.00% D	
R244	NRSA63J-221X	RESISTOR/METAL GLAZED(CHIP)	220Ω 1 / 16 W 1608 5.00% D	
R245	NRSA63J-221X	RESISTOR/METAL GLAZED(CHIP)	220Ω 1 / 16 W 1608 5.00% D	
R246	NRSA63J-221X	RESISTOR/METAL GLAZED(CHIP)	220Ω 1 / 16 W 1608 5.00% D	
R247	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R248	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R251	NRSA63J-101X	RESISTOR/METAL GLAZED(CHIP)	100Ω 1 / 16 W 1608 5.00% D	
R252	NRSA63J-101X	RESISTOR/METAL GLAZED(CHIP)	100Ω 1 / 16 W 1608 5.00% D	
R254	NRSA6AD-474W	RESISTOR/METAL GLAZED(CHIP)	470KΩ 1 / 16 W 1608 5.00% D	
R255	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R258	LG-0RH0101C622	RESISTOR/METAL GLAZED(CHIP)	1Ω 1 / 16 W 1608 5.00% D	
R259	LG-0RH0101C622	RESISTOR/METAL GLAZED(CHIP)	1Ω 1 / 16 W 1608 5.00% D	
R260	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R261	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R262	NRSA63J-563X	RESISTOR/METAL GLAZED(CHIP)	56KΩ 1 / 16 W 1608 5.00% D	
R263	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R264	LG-0RH4703C622	RESISTOR/METAL GLAZED(CHIP)	470KΩ 1 / 16 W 1608 5.00% D	
R270	LG-0RH2203C622	RESISTOR/METAL GLAZED(CHIP)	220KΩ 1 / 16 W 1608 5.00% D	
R301	NRSA63J-123X	RESISTOR/METAL GLAZED(CHIP)	12KΩ 1 / 16 W 1608 5.00% D	
R302	NRSA6AD-334W	RESISTOR/METAL GLAZED(CHIP)	330KΩ 1 / 16 W 1608 5.00% D	
R303	NRSA63J-221X	RESISTOR/METAL GLAZED(CHIP)	220Ω 1 / 16 W 1608 5.00% D	
R304	NRSA6AD-473W	RESISTOR/METAL GLAZED(CHIP)	47KΩ 1 / 16 W 1608 5.00% D	
R305	NRSA63J-223X	RESISTOR/METAL GLAZED(CHIP)	22KΩ 1 / 16 W 1608 5.00% D	
R306	NRSA63J-0R0X	RESISTOR/METAL GLAZED(CHIP)	0Ω 1 / 16 W 1608 5.00% D	
R307	NRSA63J-752X	RESISTOR/METAL GLAZED(CHIP)	7.5KΩ 1 / 16 W 1608 5.00% D	
R308	NRSA63J-0R0X	RESISTOR/METAL GLAZED(CHIP)	0Ω 1 / 16 W 1608 5.00% D	
R309	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R310	NRSA63J-101X	RESISTOR/METAL GLAZED(CHIP)	100Ω 1 / 16 W 1608 5.00% D	
R311	NRSA6AD-272W	RESISTOR/METAL GLAZED(CHIP)	2.7KΩ 1 / 16 W 1608 5.00% D	
R312	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R313	NRSA63J-221X	RESISTOR/METAL GLAZED(CHIP)	220Ω 1 / 16 W 1608 5.00% D	
R315	NRSA63J-222X	RESISTOR/METAL GLAZED(CHIP)	2.2KΩ 1 / 16 W 1608 5.00% D	
R316	NRSA6AD-272W	RESISTOR/METAL GLAZED(CHIP)	2.7KΩ 1 / 16 W 1608 5.00% D	
R317	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R319	NRSA63J-750X	RESISTOR/METAL GLAZED(CHIP)	75Ω 1 / 16 W 1608 5.00% D	
R320	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R322	NRSA6AD-823W	RESISTOR/METAL GLAZED(CHIP)	82KΩ 1 / 16 W 1608 5.00% D	
R323	NRSA63J-682X	RESISTOR/METAL GLAZED(CHIP)	6.8KΩ 1 / 16 W 1608 5.00% D	
R324	NRSA63J-152X	RESISTOR/METAL GLAZED(CHIP)	1.5KΩ 1 / 16 W 1608 5.00% D	
R325	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R326	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R328	NRSA63J-153X	RESISTOR/METAL GLAZED(CHIP)	15KΩ 1 / 16 W 1608 5.00% D	
R332	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R333	NRSA63J-562X	RESISTOR/METAL GLAZED(CHIP)	5.6KΩ 1 / 16 W 1608 5.00% D	
R337	NRSA63J-682X	RESISTOR/METAL GLAZED(CHIP)	6.8KΩ 1 / 16 W 1608 5.00% D	
R338	NRSA63J-562X	RESISTOR/METAL GLAZED(CHIP)	5.6KΩ 1 / 16 W 1608 5.00% D	
R339	LG-0RJ6804C677	RESISTOR/METAL GLAZED(CHIP)	6.8MΩ 1/16 W 5% 1608 R/TP	
R340	NRSA63J-0R0X	RESISTOR/METAL GLAZED(CHIP)	0Ω 1 / 16 W 1608 5.00% D	
R341	NRSA63J-0R0X	RESISTOR/METAL GLAZED(CHIP)	0Ω 1 / 16 W 1608 5.00% D	
R3J1	NRSA63J-0R0X	RESISTOR/METAL GLAZED(CHIP)	0Ω 1 / 16 W 1608 5.00% D	
R403	NRSA63J-471X	RESISTOR/METAL GLAZED(CHIP)	470Ω 1 / 16 W 1608 5.00% D	
R404	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R405	LG-0RH5101C622	RESISTOR/METAL GLAZED(CHIP)	5100Ω 1 / 16 W 1608 5.00% D	
R406	LG-0RH5101C622	RESISTOR/METAL GLAZED(CHIP)	5100Ω 1 / 16 W 1608 5.00% D	
R407	NRSA63J-562X	RESISTOR/METAL GLAZED(CHIP)	5.6KΩ 1 / 16 W 1608 5.00% D	
R408	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R409	NRSA63J-153X	RESISTOR/METAL GLAZED(CHIP)	15KΩ 1 / 16 W 1608 5.00% D	
R410	NRSA63J-682X	RESISTOR/METAL GLAZED(CHIP)	6.8KΩ 1 / 16 W 1608 5.00% D	
R411	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R412	NRSA63J-682X	RESISTOR/METAL GLAZED(CHIP)	6.8KΩ 1 / 16 W 1608 5.00% D	
R413	NRSA63J-153X	RESISTOR/METAL GLAZED(CHIP)	15KΩ 1 / 16 W 1608 5.00% D	
R414	NRSA63J-122X	RESISTOR/METAL GLAZED(CHIP)	1.2KΩ 1 / 16 W 1608 5.00% D	
R415	NRSA63J-122X	RESISTOR/METAL GLAZED(CHIP)	1.2KΩ 1 / 16 W 1608 5.00% D	
R416	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R417	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R418	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R419	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R420	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R422	LG-0RH0561C622	RESISTOR/METAL GLAZED(CHIP)	5.6Ω 1 / 16 W 1608 5.00% D	
R423	NRSA6AD-470W	RESISTOR/METAL GLAZED(CHIP)	47Ω 1 / 16 W 1608 5.00% D	
R424	NRSA6AD-470W	RESISTOR/METAL GLAZED(CHIP)	47Ω 1 / 16 W 1608 5.00% D	
R425	NRSA6AD-470W	RESISTOR/METAL GLAZED(CHIP)	47Ω 1 / 16 W 1608 5.00% D	
R501	NRSA63J-101X	RESISTOR/METAL GLAZED(CHIP)	100Ω 1 / 16 W 1608 5.00% D	
R502	NRSA63J-101X	RESISTOR/METAL GLAZED(CHIP)	100Ω 1 / 16 W 1608 5.00% D	
R504	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R505	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R507	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R508	NRSA6AD-273W	RESISTOR/METAL GLAZED(CHIP)	27KΩ 1 / 16 W 1608 5.00% D	
R509	NRSA63J-561X	RESISTOR/METAL GLAZED(CHIP)	560Ω 1 / 16 W 1608 5.00% D	
R511	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R512	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R513	NRSA63J-331X	RESISTOR/METAL GLAZED(CHIP)	330Ω 1 / 16 W 1608 5.00% D	
R515	NRSA6AD-270W	RESISTOR/METAL GLAZED(CHIP)	270Ω 1 / 16 W 1608 5.00% D	
R516	NRSA63J-563X	RESISTOR/METAL GLAZED(CHIP)	56KΩ 1 / 16 W 1608 5.00% D	
R518	NRSA63J-101X	RESISTOR/METAL GLAZED(CHIP)	100Ω 1 / 16 W 1608 5.00% D	
R519	NRSA63J-101X	RESISTOR/METAL GLAZED(CHIP)	100Ω 1 / 16 W 1608 5.00% D	
R520	NRSA63J-101X	RESISTOR/METAL GLAZED(CHIP)	100Ω 1 / 16 W 1608 5.00% D	
R521	NRSA6AD-272W	RESISTOR/METAL GLAZED(CHIP)	2.7KΩ 1 / 16 W 1608 5.00% D	
R522	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R523	NRSA63J-562X	RESISTOR/METAL GLAZED(CHIP)	5.6KΩ 1 / 16 W 1608 5.00% D	
R525	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R526	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R528	NRSA6AD-272W	RESISTOR/METAL GLAZED(CHIP)	2.7KΩ 1 / 16 W 1608 5.00% D	
R529	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R531	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R533	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R534	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R535	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R536	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R537	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R538	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R541	NRSA63J-222X	RESISTOR/METAL GLAZED(CHIP)	2.2KΩ 1 / 16 W 1608 5.00% D	
R544	NRSA63J-104X	RESISTOR/METAL GLAZED(CHIP)	100KΩ 1 / 16 W 1608 5.00% D	
R546	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R547	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R550	NRSA63J-221X	RESISTOR/METAL GLAZED(CHIP)	220Ω 1 / 16 W 1608 5.00% D	
R553	NRSA63J-221X	RESISTOR/METAL GLAZED(CHIP)	220Ω 1 / 16 W 1608 5.00% D	
R554	NRSA63J-105X	RESISTOR/METAL GLAZED(CHIP)	1MΩ 1 / 16 W 1608 5.00% D	
R555	NRSA63J-221X	RESISTOR/METAL GLAZED(CHIP)	220Ω 1 / 16 W 1608 5.00% D	
R556	NRSA63J-223X	RESISTOR/METAL GLAZED(CHIP)	22KΩ 1 / 16 W 1608 5.00% D	
R557	NRSA6AD-273W	RESISTOR/METAL GLAZED(CHIP)	27KΩ 1 / 16 W 1608 5.00% D	
R558	NRSA63J-223X	RESISTOR/METAL GLAZED(CHIP)	22KΩ 1 / 16 W 1608 5.00% D	
R563	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R564	NRSA6AD-273W	RESISTOR/METAL GLAZED(CHIP)	27KΩ 1 / 16 W 1608 5.00% D	
R566	NRSA6AD-272W	RESISTOR/METAL GLAZED(CHIP)	2.7KΩ 1 / 16 W 1608 5.00% D	
R569	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R570	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R571	NRSA63J-221X	RESISTOR/METAL GLAZED(CHIP)	220Ω 1 / 16 W 1608 5.00% D	
R575	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R576	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R577	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R578	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R579	NRSA63J-563X	RESISTOR/METAL GLAZED(CHIP)	56KΩ 1 / 16 W 1608 5.00% D	
R580	NRSA63J-123X	RESISTOR/METAL GLAZED(CHIP)	12KΩ 1 / 16 W 1608 5.00% D	
R581	NRSA63J-222X	RESISTOR/METAL GLAZED(CHIP)	2.2KΩ 1 / 16 W 1608 5.00% D	
R582	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R583	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R586	NRSA63J-182X	RESISTOR/METAL GLAZED(CHIP)	1.8KΩ 1 / 16 W 1608 5.00% D	
R587	NRSA63J-182X	RESISTOR/METAL GLAZED(CHIP)	1.8KΩ 1 / 16 W 1608 5.00% D	
R588	NRSA63J-332X	RESISTOR/METAL GLAZED(CHIP)	3.3KΩ 1 / 16 W 1608 5.00% D	
R589	NRSA63J-152X	RESISTOR/METAL GLAZED(CHIP)	1.5KΩ 1 / 16 W 1608 5.00% D	
R592	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R593	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R594	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R595	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R596	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R597	NRSA63J-222X	RESISTOR/METAL GLAZED(CHIP)	2.2KΩ 1 / 16 W 1608 5.00% D	
R598	NRSA63J-122X	RESISTOR/METAL GLAZED(CHIP)	1.2KΩ 1 / 16 W 1608 5.00% D	
R599	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	

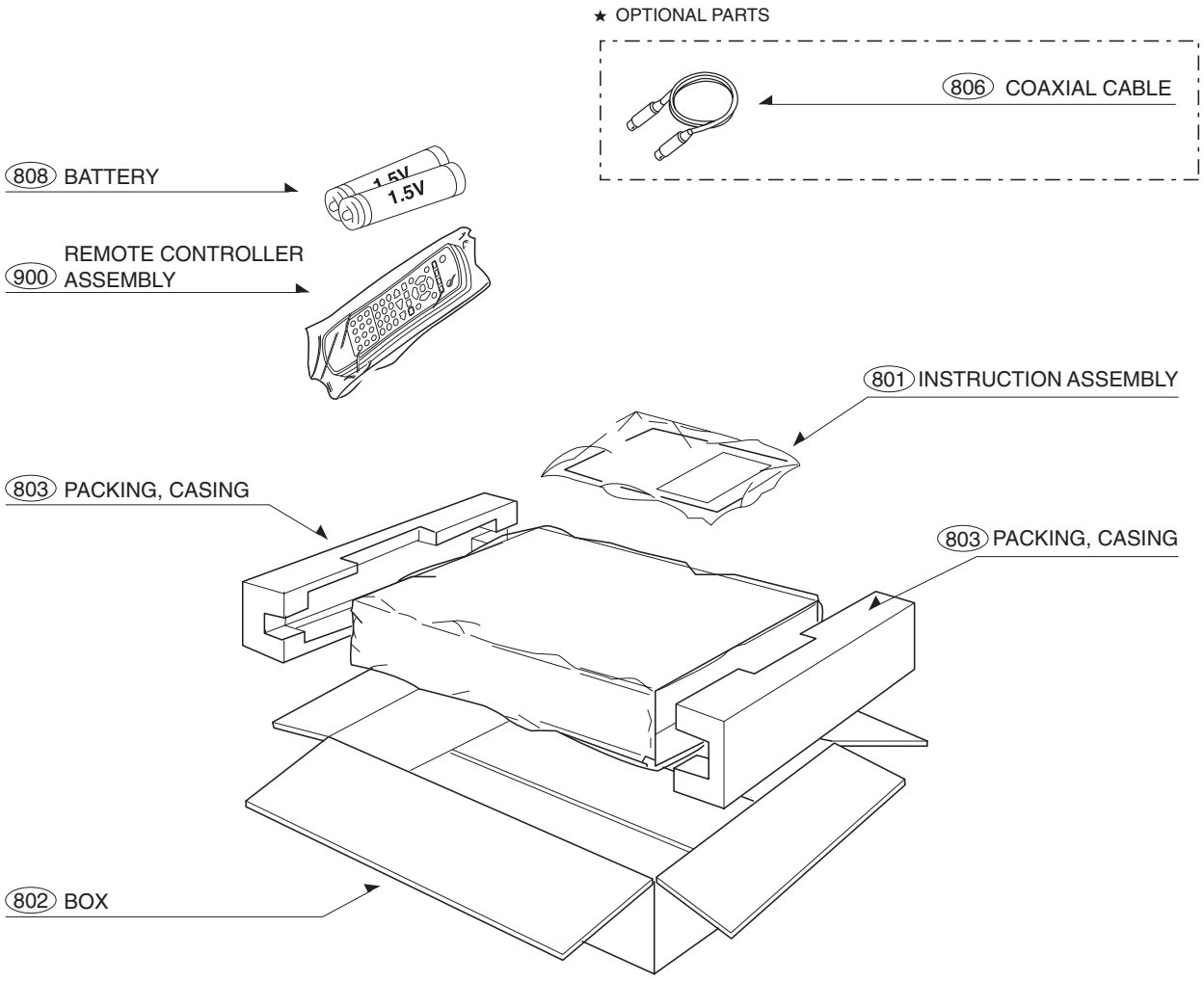
⚠ Symbol No.	Part No.	Part Name	Description	Local
R5C6	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R5C7	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R5D1	NRSA63J-0R0X	RESISTOR/METAL GLAZED(CHIP)	0Ω 1 / 16 W 1608 5.00% D	
R5D2	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R5D3	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R5D4	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R5D5	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R5K1	NRSA63J-681X	RESISTOR/METAL GLAZED(CHIP)	680Ω 1 / 16 W 1608 5.00% D	
R5K2	NRSA6AD-821W	RESISTOR/METAL GLAZED(CHIP)	820Ω 1 / 16 W 1608 5.00% D	
R5K3	NRSA63J-122X	RESISTOR/METAL GLAZED(CHIP)	1.2KΩ 1 / 16 W 1608 5.00% D	
R5K4	NRSA63J-152X	RESISTOR/METAL GLAZED(CHIP)	1.5KΩ 1 / 16 W 1608 5.00% D	
R5K5	NRSA63J-222X	RESISTOR/METAL GLAZED(CHIP)	2.2KΩ 1 / 16 W 1608 5.00% D	
R5L1	NRSA63J-750X	RESISTOR/METAL GLAZED(CHIP)	75Ω 1 / 16 W 1608 5.00% D	
R601	NRSA63J-153X	RESISTOR/METAL GLAZED(CHIP)	15KΩ 1 / 16 W 1608 5.00% D	
R602	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R603	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R604	NRSA6AD-393W	RESISTOR/METAL GLAZED(CHIP)	39KΩ 1 / 16 W 1608 5.00% D	
R605	LG-0RH2002C622	RESISTOR/METAL GLAZED(CHIP)	20KΩ 1 / 16 W 1608 5.00% D	
R606	NRSA63J-0R0X	RESISTOR/METAL GLAZED(CHIP)	0Ω 1 / 16 W 1608 5.00% D	
R607	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
R608	LG-0LC11608D01	INDUCTOR/CHIP	HB-1M1608-121JT CERATECH R/TP	
R609	LG-0RH0752C422	RESISTOR/METAL GLAZED(CHIP)	75Ω 1 / 16 W 1608 1.00% D	
R610	LG-0RH0752C422	RESISTOR/METAL GLAZED(CHIP)	75Ω 1 / 16 W 1608 1.00% D	
R611	LG-0RH0752C422	RESISTOR/METAL GLAZED(CHIP)	75Ω 1 / 16 W 1608 1.00% D	
R612	LG-0RH0752C422	RESISTOR/METAL GLAZED(CHIP)	75Ω 1 / 16 W 1608 1.00% D	
R613	LG-0RJ3920C477	RESISTOR/METAL GLAZED(CHIP)	392Ω 1/16 W 1% 1608 R/TP	
R614	NRSA63J-750X	RESISTOR/METAL GLAZED(CHIP)	75Ω 1 / 16 W 1608 5.00% D	
R615	NRSA63J-104X	RESISTOR/METAL GLAZED(CHIP)	100KΩ 1 / 16 W 1608 5.00% D	
R616	LG-0RH2203C622	RESISTOR/METAL GLAZED(CHIP)	220KΩ 1 / 16 W 1608 5.00% D	
R617	LG-0RH0752C422	RESISTOR/METAL GLAZED(CHIP)	75Ω 1 / 16 W 1608 1.00% D	
R619	NRSA63J-100X	RESISTOR/METAL GLAZED(CHIP)	10Ω 1 / 16 W 1608 5.00% D	
R620	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R621	NRSA63J-222X	RESISTOR/METAL GLAZED(CHIP)	2.2KΩ 1 / 16 W 1608 5.00% D	
R622	NRSA63J-222X	RESISTOR/METAL GLAZED(CHIP)	2.2KΩ 1 / 16 W 1608 5.00% D	
R624	LG-0LCCE00041A	INDUCTOR/CHIP	HB_1M1608_301JT CERATECH R/TP	
R625	LG-0LCCE00041A	INDUCTOR/CHIP	HB_1M1608_301JT CERATECH R/TP	
R626	LG-0LCCE00041A	INDUCTOR/CHIP	HB_1M1608_301JT CERATECH R/TP	
R627	LG-0LCCE00041A	INDUCTOR/CHIP	HB_1M1608_301JT CERATECH R/TP	
R628	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R629	NRSA63J-101X	RESISTOR/METAL GLAZED(CHIP)	100Ω 1 / 16 W 1608 5.00% D	
R632	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R633	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R634	NRSA63J-0R0X	RESISTOR/METAL GLAZED(CHIP)	0Ω 1 / 16 W 1608 5.00% D	
R636	NRSA63J-0R0X	RESISTOR/METAL GLAZED(CHIP)	0Ω 1 / 16 W 1608 5.00% D	
R638	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R639	LG-0RH2001C622	RESISTOR/METAL GLAZED(CHIP)	2KΩ 1 / 16 W 1608 5.00% D	
R640	LG-0RH2001C622	RESISTOR/METAL GLAZED(CHIP)	2KΩ 1 / 16 W 1608 5.00% D	
R641	NRSA63J-122X	RESISTOR/METAL GLAZED(CHIP)	1.2KΩ 1 / 16 W 1608 5.00% D	
R642	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R643	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R646	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R648	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R651	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
R652	LG-0CH1104K942	CAPACITOR/FIXED CERAMIC(TEMP.C	0.1UF 50V 80%/-20% Y5V(F) 1608	
R661	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R670	LG-0LC11608D01	INDUCTOR/CHIP	HB-1M1608-121JT CERATECH R/TP	
R671	LG-0LC11608D01	INDUCTOR/CHIP	HB-1M1608-121JT CERATECH R/TP	
R682	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	.7KΩ 1 / 16 W 1608 5.00% D	
R683	LG-0RH2001C622	RESISTOR/METAL GLAZED(CHIP)	2KΩ 1 / 16 W 1608 5.00% D	
R684	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R685	NRSA63J-122X	RESISTOR/METAL GLAZED(CHIP)	1.2KΩ 1 / 16 W 1608 5.00% D	
R686	LG-0RH2001C622	RESISTOR/METAL GLAZED(CHIP)	2KΩ 1 / 16 W 1608 5.00% D	
R687	NRSA63J-0R0X	RESISTOR/METAL GLAZED(CHIP)	0Ω 1 / 16 W 1608 5.00% D	
R688	NRSA63J-0R0X	RESISTOR/METAL GLAZED(CHIP)	0Ω 1 / 16 W 1608 5.00% D	
R702	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R706	NRSA63J-681X	RESISTOR/METAL GLAZED(CHIP)	680Ω 1 / 16 W 1608 5.00% D	
R707	NRSA63J-681X	RESISTOR/METAL GLAZED(CHIP)	680Ω 1 / 16 W 1608 5.00% D	
R708	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R711	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R714	NRSA63J-222X	RESISTOR/METAL GLAZED(CHIP)	2.2KΩ 1 / 16 W 1608 5.00% D	
R715	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R801	NRSA63J-101X	RESISTOR/METAL GLAZED(CHIP)	100Ω 1 / 16 W 1608 5.00% D	
R802	NRSA6AD-473W	RESISTOR/METAL GLAZED(CHIP)	47KΩ 1 / 16 W 1608 5.00% D	
R804	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R805	NRSA6AD-473W	RESISTOR/METAL GLAZED(CHIP)	47KΩ 1 / 16 W 1608 5.00% D	
R806	NRSA63J-682X	RESISTOR/METAL GLAZED(CHIP)	6.8KΩ 1 / 16 W 1608 5.00% D	
R807	NRSA63J-563X	RESISTOR/METAL GLAZED(CHIP)	56KΩ 1 / 16 W 1608 5.00% D	
R808	NRSA63J-222X	RESISTOR/METAL GLAZED(CHIP)	2.2KΩ 1 / 16 W 1608 5.00% D	
R809	LG-0RH1800C622	RESISTOR/METAL GLAZED(CHIP)	180Ω 1 / 16 W 1608 5.00% D	
R810	NRSA63J-182X	RESISTOR/METAL GLAZED(CHIP)	1.8KΩ 1 / 16 W 1608 5.00% D	
R811	NRSA63J-563X	RESISTOR/METAL GLAZED(CHIP)	56KΩ 1 / 16 W 1608 5.00% D	
R812	NRSA63J-682X	RESISTOR/METAL GLAZED(CHIP)	6.8KΩ 1 / 16 W 1608 5.00% D	
R813	NRSA63J-563X	RESISTOR/METAL GLAZED(CHIP)	56KΩ 1 / 16 W 1608 5.00% D	
R814	NRSA63J-682X	RESISTOR/METAL GLAZED(CHIP)	6.8KΩ 1 / 16 W 1608 5.00% D	
R817	NRSA63J-153X	RESISTOR/METAL GLAZED(CHIP)	15KΩ 1 / 16 W 1608 5.00% D	
R818	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R821	NRSA63J-103X	RESISTOR/METAL GLAZED(CHIP)	10KΩ 1 / 16 W 1608 5.00% D	
R822	NRSA63J-104X	RESISTOR/METAL GLAZED(CHIP)	100KΩ 1 / 16 W 1608 5.00% D	
R823	LG-0RH3002C622	RESISTOR/METAL GLAZED(CHIP)	30KΩ 1 / 16 W 1608 5.00% D	
R836	NRSA63J-471X	RESISTOR/METAL GLAZED(CHIP)	470Ω 1 / 16 W 1608 5.00% D	
R838	NRSA6AD-272W	RESISTOR/METAL GLAZED(CHIP)	2.7KΩ 1 / 16 W 1608 5.00% D	
R839	NRSA6AD-393W	RESISTOR/METAL GLAZED(CHIP)	39KΩ 1 / 16 W 1608 5.00% D	
R842	NRSA63J-101X	RESISTOR/METAL GLAZED(CHIP)	100Ω 1 / 16 W 1608 5.00% D	
R843	NRSA63J-101X	RESISTOR/METAL GLAZED(CHIP)	100Ω 1 / 16 W 1608 5.00% D	
R844	NRSA63J-101X	RESISTOR/METAL GLAZED(CHIP)	100Ω 1 / 16 W 1608 5.00% D	
R845	NRSA63J-101X	RESISTOR/METAL GLAZED(CHIP)	100Ω 1 / 16 W 1608 5.00% D	
R851	NRSA63J-101X	RESISTOR/METAL GLAZED(CHIP)	100Ω 1 / 16 W 1608 5.00% D	
R856	NRSA63J-682X	RESISTOR/METAL GLAZED(CHIP)	6.8KΩ 1 / 16 W 1608 5.00% D	
R857	NRSA63J-563X	RESISTOR/METAL GLAZED(CHIP)	56KΩ 1 / 16 W 1608 5.00% D	
R858	NRSA6AD-473W	RESISTOR/METAL GLAZED(CHIP)	47KΩ 1 / 16 W 1608 5.00% D	
R866	NRSA6AD-473W	RESISTOR/METAL GLAZED(CHIP)	47KΩ 1 / 16 W 1608 5.00% D	
R867	NRSA63J-153X	RESISTOR/METAL GLAZED(CHIP)	15KΩ 1 / 16 W 1608 5.00% D	
R874	NRSA63J-472X	RESISTOR/METAL GLAZED(CHIP)	4.7KΩ 1 / 16 W 1608 5.00% D	
R901	NRSA63J-750X	RESISTOR/METAL GLAZED(CHIP)	75Ω 1 / 16 W 1608 5.00% D	
R902	NRSA6AD-823W	RESISTOR/METAL GLAZED(CHIP)	82KΩ 1 / 16 W 1608 5.00% D	
R903	NRSA6AD-823W	RESISTOR/METAL GLAZED(CHIP)	82KΩ 1 / 16 W 1608 5.00% D	
R904	NRSA63J-750X	RESISTOR/METAL GLAZED(CHIP)	75Ω 1 / 16 W 1608 5.00% D	
R905	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R906	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
R907	NRSA63J-0R0X	RESISTOR/METAL GLAZED(CHIP)	0Ω 1 / 16 W 1608 5.00% D	
R910	NRSA6AD-270W	RESISTOR/METAL GLAZED(CHIP)	270Ω 1 / 16 W 1608 5.00% D	
R912	NRSA6AD-270W	RESISTOR/METAL GLAZED(CHIP)	270Ω 1 / 16 W 1608 5.00% D	
R928	NRSA63J-102X	RESISTOR/METAL GLAZED(CHIP)	1KΩ 1 / 16 W 1608 5.00% D	
L202	LG-6200HJC102A	FILTER(CIRC)/EMC	HB-1M2012-102JT CERATECH TP 3K	
L205	LG-6200HJC102A	FILTER(CIRC)/EMC	HB-1M2012-102JT CERATECH TP 3K	
L300	LG-0LR0332K035	INDUCTOR/RADIAL LEAD	33UH 10% TP 6 X 6 TR5 -	
L301	LG-0LR1000K035	INDUCTOR/RADIAL LEAD	100UH 10% TP 6 X 6 TR5 -	
L302	LG-0LR1000K035	INDUCTOR/RADIAL LEAD	100UH 10% TP 6 X 6 TR5 -	
L303	LG-0LA1200K018	INDUCTOR/AXIAL LEAD	120UH 10% TP 2.3 X 3.4 TA26 -	
L304	LG-0LR1000K035	INDUCTOR/RADIAL LEAD	100UH 10% TP 6 X 6 TR5 -	
L306	LG-0LR1000K035	INDUCTOR/RADIAL LEAD	100UH 10% TP 6 X 6 TR5 -	
L307	LG-0LA0122K018	INDUCTOR/AXIAL LEAD	12UH 10% TP 2.3 X 3.4 TA26 -	
L308	LG-0LR1000K035	INDUCTOR/RADIAL LEAD	100UH 10% TP 6 X 6 TR5 -	
L310	LG-0LCCE00004L	INDUCTOR/CHIP	1UH / CHIP2012 CERATECH R/TP	
L311	LG-0LR1000K035	INDUCTOR/RADIAL LEAD	100UH 10% TP 6 X 6 TR5 -	
L501	LG-0LR1000K035	INDUCTOR/RADIAL LEAD	100UH 10% TP 6 X 6 TR5 -	
L511	LG-0LR0221J0N5	INDUCTOR/RADIAL LEAD	2.2UH 5% TP 3X5 TR5	
L512	LG-0LR1000K035	INDUCTOR/RADIAL LEAD	100UH 10% TP 6 X 6 TR5 -	
L5F1	LG-0LA0102K018	INDUCTOR/AXIAL LEAD	10UH 10% TP 2.3 X 3.4 TA26 -	
L5F2	LG-0LA0102K018	INDUCTOR/AXIAL LEAD	10UH 10% TP 2.3 X 3.4 TA26 -	
L5G1	LG-0LR4700K035	INDUCTOR/RADIAL LEAD	470UH 10% TP 6 X 6 TR5 -	
L601	LG-6200HJC102A	FILTER(CIRC)/EMC	HB-1M2012-102JT CERATECH TP 3K	
L602	LG-6200HJC102A	FILTER(CIRC)/EMC	A FILTER(CIRC)/EMC HB-1M2012-102JT CERATECH TP 3K	
L603	LG-6200HJC102A	FILTER(CIRC)/EMC	HB-1M2012-102JT CERATECH TP 3K	
L604	LG-6200RJC002A	FILTER(CIRC)/EMC	HB-1S1608-300 CERATECH TP	
L605	LG-0LCCE00041A	INDUCTOR/CHIP	HB_1M1608_301JT CERATECH R/TP	
L607	LG-6200HJC102A	FILTER(CIRC)/EMC	HB-1M2012-102JT CERATECH TP 3K	
L608	LG-6200HJC102A	FILTER(CIRC)/EMC	HB-1M2012-102JT CERATECH TP 3K	
L609	LG-6200RJC002A	FILTER(CIRC)/EMC	HB-1S1608-300 CERATECH TP	
L610	LG-6200RJC003A	FILTER(CIRC)/EMC	HB-1S1608-121 CERATECH TP	
L611	LG-0LCCE00041A	INDUCTOR/CHIP	HB_1M1608_301JT CERATECH R/TP	
L612	LG-0LCCE00041A	INDUCTOR/CHIP	HB_1M1608_301JT CERATECH R/TP	
L613	LG-6200HJC102A	FILTER(CIRC)/EMC	HB-1M2012-102JT CERATECH TP 3K	
L701	LG-6200HJC102A	FILTER(CIRC)/EMC	HB-1M2012-102JT CERATECH TP 3K	
L702	LG-6200HJC102A	FILTER(CIRC)/EMC	HB-1M2012-102JT CERATECH TP 3K	
L703	LG-0LR0102K035	INDUCTOR/RADIAL LEAD	10UH 10% TP 6 X 6 TR5 -	
L822	LG-0LR1000K035	INDUCTOR/RADIAL LEAD	100UH 10% TP 6 X 6 TR5 -	
L906	LG-0LA0102K018	INDUCTOR/AXIAL LEAD	10UH 10% TP 2.3 X 3.4 TA26 -	
L907	LG-0LA0102K018	INDUCTOR/AXIAL LEAD	10UH 10% TP 2.3 X 3.4 TA26 -	
L908	LG-0LA0102K018	INDUCTOR/AXIAL LEAD	10UH 10% TP 2.3 X 3.4 TA26 -	
L909	LG-0LA0102K018	INDUCTOR/AXIAL LEAD	10UH 10% TP 2.3 X 3.4 TA26 -	
CN201	LG-6630R-FB10W	CONNECTOR (CIRC)/FFC/FPC	00-6232-023-006-800 ELCO 23PIN	
CN202	LG-6630R-FB10K	CONNECTOR (CIRC)/FFC/FPC	00-6232-011-006-800 ELCO 11P 1	
CN701	LG-6630B60E913	CONNECTOR (CIRC)/BOARD TO BOAR	JE117-D22T-13 JAE EUN 13P 2.54	

⚠ Symbol No.	Part No.	Part Name	Description	Local
CS5D1	LG-6600M000026	SWITCH/PUSH	MPU12970MLB0 VCR CST IN S/W MI	
ES501	LG-4931R-0085C	HOLDER ASSEMBLY	VCR DECK/MECHA END(S)	
ES502	LG-4931R-0085C	HOLDER ASSEMBLY	VCR DECK/MECHA END(S)	
J602	NRSA63J-0R0X	RESISTOR/METAL GLAZED(CHIP)	0Ω 1 / 16 W 1608 5.00% D	
J603	NRSA63J-0R0X	RESISTOR/METAL GLAZED(CHIP)	0Ω 1 / 16 W 1608 5.00% D	
J604	NRSA63J-0R0X	RESISTOR/METAL GLAZED(CHIP)	0Ω 1 / 16 W 1608 5.00% D	
J901	LG-6200HJC102A	FILTER(CIRC)/EMC	HB-1M2012-102JT CERATECH TP 3K	
J902	LG-6200HJC102A	FILTER(CIRC)/EMC	HB-1M2012-102JT CERATECH TP 3K	
J903	LG-6200HJC102A	FILTER(CIRC)/EMC	HB-1M2012-102JT CERATECH TP 3K	
JK5L1	LG-6612J00053A	JACK/RCA	DPAE-0385 DOOWON RGB 2004 CO	
JK901	LG-6612J00049A	JACK/RCA	RCA-1205A-01-01 YUQIU 2004 COM	
LD501	LG-4931R-0089C	HOLDER ASSEMBLY	VCR DECK/MECHA END(S)	
LED501	LG-6301R2U011A	LED ASSEMBLY	TOS-366AGMGMRMY-B OASIS UNIVER	
MS501	LG-6600JR3002D	SWITCH/MODE	SSS-51MD-3 SHINMEI 5VDC 1MA D3	
P3D01	LG-561-234S	CONNECTOR (CIRC)/FFC/FPC	GF120-9S-TS-A LG CABLE 9P 1.25	
P3D02	LG-6630R5S008J	CONNECTOR(CIRC)/DRAWING	06(11)FM22.5H-BTR-SH (LF)(SN)	
P3D03	LG-561-251B	CONNECTOR(CIRC)/DRAWING	GB201-2P-TS-B(LGC)	
PM602	LG-561-036A	CONNECTOR (CIRC)/WAFER	MA V 8283-0212 WH ELCO	
PMC01	LG-6630BK01612	CONNECTOR (CIRC)/BOARD TO BOAR	JE612-A2T-12A JAE EUN 12P 2.0M	
RC501	LG-6712R1938HA	REMOTE CONTROLLER RECEIVER	356VF4 OPTO 38.0KHZ 19MM(356VF	
RS501	LG-6500RAB008A	SENSOR	KIT-3001A REEL SENSOR KODENSHI	
RS502	LG-6500RAB008A	SENSOR	KIT-3001A REEL SENSOR KODENSHI	
SW501	LG-556-213C	SWITCH/DETECTOR	THV10912B TACT DC 12 V 5-0 A V	
SW502	LG-556-213C	SWITCH/DETECTOR	THV10912B TACT DC 12 V 5-0 A V	
SW503	LG-556-213C	SWITCH/DETECTOR	THV10912B TACT DC 12 V 5-0 A V	
SW504	LG-556-213C	SWITCH/DETECTOR	THV10912B TACT DC 12 V 5-0 A V	
SW505	LG-556-213C	SWITCH/DETECTOR	THV10912B TACT DC 12 V 5-0 A V	
SW506	LG-556-213C	SWITCH/DETECTOR	THV10912B TACT DC 12 V 5-0 A V	
TU701	LG-6700NFNL05A	TUNER	TADM-H202F(US.LGIT) LG INOTEK	
X301	LG-6212AB2359C	RESONATOR/CRYSTAL	HC-49/SM BUBANG 3.579545MHZ +/	
X501	QAX0444-001	RESONATOR/CRYSTAL	CFS-308 CITIZEN 32.768KHZ +/-	
X502	LG-6212AA2148F	RESONATOR/CRYSTAL	HC-49S KITELCO 14.31818MHZ +/-	
X601	LG-6212AA2271F	RESONATOR/CRYSTAL	HC-49S KITELCO 27MHZ +/- 20 PP	
ZD501	LG-0DZ562609BB	DIODE/ZENERS	UZ-5.6BSB 26MM TP PYUNG CHANG	
ZD502	LG-0DZ562609BB	DIODE/ZENERS	UZ-5.6BSB 26MM TP PYUNG CHANG	
ZD503	LG-0DZ562609BB	DIODE/ZENERS	UZ-5.6BSB 26MM TP PYUNG CHANG	
ZD504	LG-0DZ562609BB	DIODE/ZENERS	UZ-5.6BSB 26MM TP PYUNG CHANG	
ZD505	LG-0DZ562609BB	DIODE/ZENERS	UZ-5.6BSB 26MM TP PYUNG CHANG	
ZD506	LG-0DZ562609BB	DIODE/ZENERS	UZ-5.6BSB 26MM TP PYUNG CHANG	
ZD701	LG-0DZ622609AB	DIODE/ZENERS	UZ-6.2BSA 26MM TP PYUNG CHANG	

Packing materials and accessories parts list

The instruction manual to be provided with this product will differ according to the destination.

Block No. M4MM



Packing and accessories

Block No. [M][4][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
801	LG-3835RV0042E	INSTRUCTION ASSEMBLY	VCR VJ9010CMZ.NA1UJJ3/4 O/M AS	16US,17US
801	LG-3835RV0042F	INSTRUCTION ASSEMBLY	VCR VJ9010CMZ.NA1CJJS/B O/M AS	16UC,17UC
802	LG-3890R-C355B	BOX	VJ9010CMZ NA1UJJ3 SWW3-A	16US
802	LG-3890R-C355C	BOX	VJ9010CMZ NA1UJJ4 SWW3-A	17US
802	LG-3890R-C355D	BOX	VJ9010CMZ NA1UJJ3 SWW3-A	16UC
802	LG-3890R-C355E	BOX	VJ9010CMZ NA1CJJS SWW3-A	17UC
803	LG-3920R-E168A	PACKING	VCR COMBIV9 130 COMBI	
806	LG-6850R-CAA2E	CABLE/COAXIAL	RF CABLE NTSC KOREA/AMERICA/JA	
808	----------	BATTERY/MANGANESE	TTERY/MANGANESE AAAM(R03) SEOTONG 1-5 V - 1PA	
900	LG-6711R1N208A	REMOTE CONTROLLER ASSEMBLY	N6 VJ1020MH JVC	